

FINANCIAL TIMES

CHICAGO

Fear stalks the futures pits

Page 17

No.30,750

Monday January 23 1989

D 8523A

World News

Business Summary

Gandhi heads for defeat in Tamil Nadu elections

Rajiv Gandhi, Indian Prime Minister, was heading for a humiliating defeat in assembly elections in the southern state of Tamil Nadu...

Seoul riot clash

South Korean riot police used tear gas in a clash with 10,000 anti-government and anti-American demonstrators...

1m jobs go in USSR

More than 1.1m people lost their jobs in the state sector of the Soviet economy last year...

Ambush kills priest

Mozambican National Resistance (MNR) rebels killed a Portuguese priest and five other people in two separate attacks last week...

Tension in Kabul

Tension continued to mount in the Afghan capital of Kabul over the weekend as embassies started to close...

Herzog for Tokyo

Israel's cabinet, reversing an earlier decision, decided that President Chaim Herzog should attend the funeral next month of Japan's Emperor Hirohito...

Iran drugs move

Iranian security forces have killed six traffickers near the southern city of Kerman and seized hundreds of kilos of opium and heroin in raids...

Czech arrests claim

Police detained more than 800 people last week during Czechoslovakia's biggest wave of political protest since the Soviet-led invasion of 1968...

Fraud Office inquiry into purchases of GPG shares

A bundle of documents detailing what appeared to be cover buying of the shares of the UK's Guinness Peat financial services group has been shown by Bank of England officials to the Serious Fraud Office...

EMS January 20, 1989

Interest rates were marked up in the EMS last week, prompted by a rise in the West German discount rate...

EUROPEAN Monetary System

While the D-Mark remains weak against the dollar, there is little chance of a build up of the D-Mark in the northern member of the system...

EMS January 20, 1989

The chart shows the two constraints on European Monetary System exchange rates...

EUROPEAN Monetary System

The chart shows the two constraints on European Monetary System exchange rates...

EUROPEAN Monetary System

The chart shows the two constraints on European Monetary System exchange rates...

EUROPEAN Monetary System

The chart shows the two constraints on European Monetary System exchange rates...

EUROPEAN Monetary System

The chart shows the two constraints on European Monetary System exchange rates...

Sakharov launches big election challenge

By Quentin Peel in Moscow

DR Andrei Sakharov, the Nobel Prize-winner and veteran Soviet human rights campaigner, yesterday threw down the biggest election challenge yet to the Soviet leadership...

His name was put forward as a candidate to represent the Soviet capital in the newly expanded national Parliament at an emotional meeting attended by almost 1,000 supporters...

The move means that he will stand against Mr Vitaly Vorotnikov, a senior member of the Politburo, and president of the Russian Federation...

Party, who was sacked from those jobs for demanding faster and more radical reforms. A top election official confirmed that all the nominations were valid...

Dr Sakharov himself was rejected last week as a candidate by the Academy of Sciences, of which he is a member of the presidium...

Looking frail and tired, the 67-year-old nuclear physicist pledged his determination to contest the seat, covering the

entire city of 8m, as one of the representatives of the Russian Federation. "I am moved and excited by the fact you have put in me," he told the crowd. "I will do everything in my power to justify it."

Dr Sakharov spent out a campaign platform of strong support for perestroika, but with key extra demands. He called for the release of all political prisoners...

Outside, where a large crowd of supporters could not fit into the hall of the House of the Cinema, fears spread that the meeting might be packed with conservatives to prevent Dr Sakharov's nomination going forward...

reassure some 3,000 standing in the cold drizzle, that there were "no extremists" causing trouble inside. One astonished former inmate of a Soviet labour camp told reporters: "This is a fantastic moment. Who could have thought 10 years ago it would ever come to this?"

The enthusiasm was tempered by strong criticism of the election process, however. Angry speakers at the meeting denounced the nominations around the Soviet Union so far...

On the other hand, the Russian leadership is expected to have made \$100,000 in trading profits during his time on the floor. The FBI investigation is expected to lead to some influential figures in the US futures industry...



Nominated to stand for Moscow: Boris Yeltsin (above) and Andrei Sakharov

Solidarity accepts talks offer on lifting of ban

By Christopher Bobinski in Warsaw

PROSPECTS of a compromise between Poland's ruling Communist Party and the opposition improved yesterday as the leaders of Solidarity accepted an offer of talks with the authorities about the lifting of an eight-year ban on its activity as a free trade union.

If the talks are successful, Solidarity could be guaranteed a quarter of the seats in Poland's Parliament, while in return accepting the Communist party's dominant role and co-operating with a reform programme aimed at tackling the country's economic problems.

The Solidarity leadership, which met behind closed doors in a convent in the port city of Gdansk, the union's birthplace, issued a statement hailing the authorities' offer of talks as "a major step on the road to social dialogue."

It added that: "Now there exists the possibility of negotiation on Solidarity and the country's problems." The Communists' offer, extended after a stormy central committee meeting in which Gen Wojciech Jaruzelski, the party chief, survived a challenge from hard-liners, provides for the possibility of "trade union pluralism" on condition that Solidarity accepts the constitution - and, by implication, the leading role of the Communist party.

Mr Walesa told an excited crowd in the courtyard of a church in Gdansk that the authorities "had held out their hand" in a conciliatory gesture and that Solidarity was doing likewise. But he cautioned that "anything can happen," evidently keen not to raise excessively high hopes.

Expectations of a compromise between the Communists and Solidarity were dashed last year after "round-table" talks on Poland's future were aborted at the last minute when the authorities made it clear they would not allow the independent union any role on the shop floor.

However, observers said the authorities probably now shared Solidarity's wish for a shared political accord in place, along with assent to Solidarity's legalisation, in time for parliamentary elections. In these, they are ready to offer Solidarity 25 per cent of the seats in the present 460-member parliament with another 15 per cent going to more or less independent groupings and individuals.

Daimler-Benz to take control of MBB group

By Haig Simonian in Frankfurt

DAIMLER-BENZ, the West German motors conglomerate, has reached agreement to take a DML7m (\$225.5m) majority stake in Messerschmitt-Bölkow-Blohm, the West German aerospace and defence group.

The deal ends months of uncertainty and makes Daimler-Benz the dominant force in the German aerospace industry. It will also considerably enhance Daimler-Benz's voice in European aerospace affairs and add particular points to the recently publicised desire of British Aerospace, which itself has taken over the Rover motor group, to establish stronger relationships with its West German counterpart.

Mr Eduard Reuter, Daimler-Benz's chief executive, confirmed at the weekend that Daimler-Benz would take control of MBB in two steps. First, it would participate in a long-expected MBB rights issue, giving it a 30 per cent stake at a cost of just under DM1bn, he said.

In a second, unexpected move, Daimler would buy a further block of MBB shares from shareholders for about DM700m, leaving it with a "small majority". Mr Reuter would not reveal the size of its eventual stake.

Mr Reuter hoped both steps could be completed this year, or in 1990 at the latest, despite the need for authorisation from the Federal Cartel Office. MBB would therefore probably become part of Deutsche Aerospace, the aeronautics and defence subsidiary set up by Daimler as part of its reorganisation last year.

The takeover would be financed by a Daimler rights issue, according to Mr Reuter. Although "it would not be hard to imagine" the purchases being funded from liquidity, Daimler had decided to raise capital in view of its growth potential.

call on shareholders, which has cast a shadow over the group's share price recently. MBB's civilian aircraft activities, including Airbus production, will be moved to a new Hamburg-based company, capitalised at DML6.5m, in which MBB and the state-owned Kreditanstalt für Wiederaufbau will have 80 per cent and 20 per cent stakes respectively.

Deutsche Airbus, the German part of the European Airbus consortium, in which MBB has a roughly 38 per cent stake, will be dissolved. MBB is majority-owned by the states of Bavaria, Hamburg and Bremen, which hold about 52 per cent of the shares. A further 20 per cent is owned by Siemens and Aerospaciale through a holding company. After the rights issue, the states' share will fall to about 36 per cent, according to Mr Hanns Arnt Vogel, MBB's chief executive.

Boeing denies further delays in delivery of redesigned 747

By Roderick Oram in New York and Michael Donne in London

BOEING of the US, the world's biggest builder of jet airliners, will start deliveries of the latest version of its 747 Jumbo jet, the Series 400, later this month.

The company denied yesterday stories circulating in both the US and UK that it was further delaying deliveries and even suspending production of the 747-400 because of "unprecedented complexities" with design and manufacture of this latest, heavily redesigned version of its 20-year-old jumbo jet.

Boeing warned customers late last year that it would have to delay delivery of the earliest 747-400s of the production line for a few weeks until early this year - the first time since Boeing rolled out the original 747 in the autumn of 1968 that it had been late with a new airliner model. As a result the company has not delivered any of the 172 aircraft ordered to date.

Boeing officially attributed the delay to a larger than expected number of design changes requested by customers and ordered by the Federal Aviation Administration, plus the need to certify simultaneously three different makes of engine - General Electric, Pratt & Whitney and Rolls-Royce - for the 747-400. Boeing executives, however, have said the company is also having difficulty increasing 747

output whilst also designing a new two-crew cockpit with video displays, largely replacing instruments. "The system has given our electrical engineers fits," said a staff member at the 747 assembly plant at Everett near Seattle.

But over the weekend Boeing said that it intended to go ahead with an increase in production of the 747-400 from four to five aircraft a month, indicating it is confident it has overcome problems causing the original delay to deliveries.

In recent weeks, the company has experienced a series of difficulties with its 737 airliners, which, it has been claimed by some, indicates that quality has suffered as the company sharply increased output to fill its backlog of orders for all its aircraft types. The week-end reports of difficulties with the 747-400, now denied, had also been interpreted as a further blow to the company, following the problems already found in the twin-engine 757 airliner and the Airbus A300-600 and seven 757s with crossed wires controlling cargo hold fire extinguishers. Last week Boeing extended its request for checks to 757 airliners which have similar electrical circuits.

In addition, a 15-foot section of aluminium skin ripped off the wing of a 757 taking off from Atlanta last Thursday evening. It returned safely to

the airport. Whether the company's 737 short-haul airliners should join the roster of aircraft suspected of production defects is not yet clear.

UK investigators are trying to determine if the recent crash on the M-1 motorway in the UK Midlands of a new 737-400 that killed 44 people was caused at least in part by incorrectly wired warning systems. Boeing pointed out over the weekend that there were big design differences between the British jet and an eight-year-old 737-200 that lost its right engine as it climbed away from Chicago's O'Hare airport on Friday. The latter aircraft circled and landed safely without a fire or injury to its 32 passengers and crew.

The 737-400 series has different engines and redesigned struts holding them to the wings. But the 737-200 series has problems of its own with design rather than production flaws. Two months ago the Federal Aviation Administration ordered operators to fit all the aircraft with extra engine supports within the next 4,000 landings.

That directive stemmed from a December, 1987, incident when an engine ripped away from a USAir 737-200 taking off from Philadelphia. It landed safely. Turbulent times, Page 2

US cracks down on market crime

By Lionel Barber in Washington and Deborah Hargreaves in Chicago

THE BUSH Administration is to create new task forces to crack down on crime in the securities and commodity futures markets, Mr Richard Thornburgh, US Attorney General, said yesterday.

Last week, it emerged that the FBI had led a two-year undercover investigation into possible fraud in the Chicago commodities markets after receiving information that investors were being cheated out of tens of millions of dollars.

Some traders have linked the FBI investigation to Archer Daniels Midland, the Illinois grain-processing firm. They believe the giant agricultural conglomerate sparked the widest futures probe ever when it complained more than two years ago of alleged corrupt trading practices at the Chicago Board of Trade (CBOT), the world's largest futures exchange.

As a big grain user, Archer Daniels buys and sells futures contracts on Chicago's exchange to hedge against price fluctuations in the underlying commodities. Two traders planted by the FBI to trade in the CBOT's grain futures complex in a bid to gather evidence on trading abuses were trained by Archer Daniels, according to other grain traders.

An agent who worked in the exchange's soybean futures pit is said to have made \$100,000 in trading profits during his time on the floor. The FBI investigation is expected to lead to some influential figures in the US futures industry. The agency has targeted locals - often small-scale traders who trade for their own account - to give evidence against larger market operators in return for a promise of suspended sentences if they are charged with malpractice.

The atmosphere on Chicago's exchange floors will be one of fear and suspicion this week as the city's usually ebullient trading community clamours up. As one trading firm executive puts it: "It's hard to find out who your friends and enemies are."

US cracks down on market crime

By Lionel Barber in Washington and Deborah Hargreaves in Chicago

THE BUSH Administration is to create new task forces to crack down on crime in the securities and commodity futures markets, Mr Richard Thornburgh, US Attorney General, said yesterday.

Last week, it emerged that the FBI had led a two-year undercover investigation into possible fraud in the Chicago commodities markets after receiving information that investors were being cheated out of tens of millions of dollars.

Some traders have linked the FBI investigation to Archer Daniels Midland, the Illinois grain-processing firm. They believe the giant agricultural conglomerate sparked the widest futures probe ever when it complained more than two years ago of alleged corrupt trading practices at the Chicago Board of Trade (CBOT), the world's largest futures exchange.

As a big grain user, Archer Daniels buys and sells futures contracts on Chicago's exchange to hedge against price fluctuations in the underlying commodities. Two traders planted by the FBI to trade in the CBOT's grain futures complex in a bid to gather evidence on trading abuses were trained by Archer Daniels, according to other grain traders.

An agent who worked in the exchange's soybean futures pit is said to have made \$100,000 in trading profits during his time on the floor. The FBI investigation is expected to lead to some influential figures in the US futures industry. The agency has targeted locals - often small-scale traders who trade for their own account - to give evidence against larger market operators in return for a promise of suspended sentences if they are charged with malpractice.

The atmosphere on Chicago's exchange floors will be one of fear and suspicion this week as the city's usually ebullient trading community clamours up. As one trading firm executive puts it: "It's hard to find out who your friends and enemies are."

CONTENTS THE MONDAY INTERVIEW Moscow: Soviet state sector jobs cut by 1m in 1988 2 Brussels: EC likely to hold fire in hormone trade war 4 European electronics: Nokia - metamorphosis is only the beginning 12 Editorial comments: Debt and Mr Bush; Demoralisation in Prague 16 UK pay settlements: A struggle to turn down the heat 16 Lombardi: UK politics - the rethinking of socialism 17 World industrial review; electricity: Surveys III & IV 18 & 19

CLWYD THE BEGGARS' BROTHERS BREWERY LTD. The success of the County of Clwyd, in rebuilding its economic base, is fast becoming legendary. An amazing transformation has taken place during the 1980's, with Clwyd clearly emerging as one of the prime UK locations for company investment and expansion. In the last six years new companies have located in Clwyd from all over the UK and overseas. Many have undertaken further expansion projects and are continuing to prosper in their new location. To find out more about Clwyd and the considerable benefits it can offer your company as a new location, clip the coupon or contact the Clwyd Industry Team, Clwyd County Council, Shire Hall, Mold, Clwyd CH7 6NR. Tel: 0352-2121. Fax: 0352-58240.

OVERSEAS NEWS

Arrests of Czech protesters continue

POLICE detained more than 800 people last week during the biggest wave of political protest in Czechoslovakia since the Soviet-led invasion of 1968. Local dissident sources said yesterday, *Bentley* reports from Prague.

At least 400 people were said to have been taken into custody and interrogated on Saturday after being removed from trains in the village of Vsetaty, 30 km north of Prague, when they tried to make a pilgrimage to the grave of student activist Jan Palach.

Six successive days of demonstrations last week in Wenceslas Square, in central Prague, began after police had set upon thousands of demonstrators who gathered on January 15 to mark the 20th anniversary of Palach's suicide.

He set fire to himself to protest against the Soviet-led invasion of Czechoslovakia. Vsetaty is his home village.

At least 20 leading dissidents have been detained in police operations since last Monday, including playwright Vaclav Havel, who helped found the Charter 77 human rights movement.

The total number of detentions exceeds 800, but the sources said the figure could be inflated by numbers arrested, freed and then re-arrested. The vast majority is now believed to have been released.

Police also turned back motorists, cyclists and pedestrians on roads leading into Vsetaty, if they did not live there. The cemetery where Palach is buried was closed.

A heavy police presence deterred demonstrators from returning to Wenceslas Square on Saturday and workers were seen removing metal barriers from the area yesterday.

French Bourse likely to urge insider trading charges

By George Graham in Paris

FRANCE'S stock market regulatory authority, the Commission des Opérations en Bourse, is expected this week to complete its investigation into the Pechiney insider trading affair, which on Friday led to the resignation of a close adviser of Mr Pierre Bérégovoy, the Finance Minister.

The investigation conducted by Mr Jean-Pierre Michau, head of the Commission's inspection service, is understood to have confirmed suspicions of insider trading in the shares of Triangle Industries, just before its packaging subsidiary American National Can was bought by Pechiney, the French state-owned aluminium

group. The Commission is expected to ask for charges to be filed against some of the purchasers of shares in Triangle, although it is not clear if the source of their information, whether in the French administration or among other parties to the Pechiney acquisition of ANC, has been identified.

The evening newspaper *Le Monde* claimed on Saturday that a report had been passed to President François Mitterrand on purchases of Triangle shares by Mr Roger-Patrice Pelat, a close friend of the President since the Second World War. Mr Pelat had already been identified as the

buyer of 10,000 Triangle shares through a Paris bank, but *Le Monde* claimed he, or his son, had bought 40,000 more shares through a Swiss bank.

The report has encouraged some of the right-wing opposition to transfer their attacks to Mr Mitterrand, who has hitherto, like Mr Michel Rocard, the Prime Minister, appeared not to suffer any ill political effects from the Pechiney case.

An IFOP opinion poll published yesterday showed that 47 per cent of those questioned were satisfied with Mr Mitterrand, compared with 46 per cent a month earlier. Mr Rocard's score improved to 43 from 37 per cent in December,

when public transport strikes damaged his popularity.

Mr Bérégovoy has until now appeared to be the main political victim of the case, although he has received warm support from both the President and Prime Minister. The resignation of Mr Alain Boubill, the director of Mr Bérégovoy's private office, is viewed by political commentators as potentially damaging to the Finance Minister, whatever the validity of the accusations levelled at Mr Boubill.

Mr Hervé Hannoun, economic and financial adviser to Mr Mitterrand, was named on Saturday as Mr Boubill's suc-

cessor. A former finance ministry official and colleague of Mr Boubill's at the Elysée, the 38-year-old Mr Hannoun was councillor to Mr Pierre Mauroy when the latter was Prime Minister.

Mr Boubill, meanwhile, has quickly taken advantage of his new freedom to speak by replying to attacks on his conduct. In an interview with *Figaro* newspaper he said he would not allow himself to be turned into a scapegoat. He said that he owned around FF100,000 (29,000) of shares in French industrial companies, but no Triangle shares and no shares in privatised companies.



Mitterrand: under attack

This double act could become very big

THERE IS on world tour a new kind of show which carries potential has been spotted by some sharp-eyed observers. The two performers need to be clever, vulnerable and rich in wit: one must be a Soviet and the other an American - though in time the principle could be extended.

The path-breakers for this new form of entertainment are two economists of huge distinction.

Professor John Kenneth Galbraith has done his state - and academic - some service. Prof Stanislav Menchikov is a former UN diplomat and present adviser to the Soviet Communist Party's central committee, he is author of an array of economic works.

The show, largely presented by NSL International, the Hay Group and others, is called Capitalism, Communism and Coexistence, and is a riot.

John Lloyd visits an East-West chat show, live on stage in Manchester

His British debut was put on by the Manchester Business School at the Royal Northern College of Music next door, composed by Brian Redhead and introduced by Peter Dettl-

There was no question that this was star time. Ustinov set the tone, when he gave as a major reason for thinking that Mr Mikhail Gorbachev was genuine, the fact that the Soviet leader had given Dettl-

You have to reflect that this proves only that Mr Gorbachev is a hot timekeeper.

The double-act is an academic discourse spiced with comfortably blunted, well-rehearsed barbs. An example: Galbraith: "I am balanced equally by two Russians (Ustinov and Menchikov)."

Menchikov: "Well, you know, we always have twice as many missiles as you."

Menchikov: "I have a tape recorder in my pocket - it seems to be acting up."

Galbraith: "This is a pre-emptive situation - he has to take a machine to record his own remarks."

"These bits are hilarious in cold print, but had the audience in stitches: it was the ambience, the sight of an American and a Soviet sitting down to tease each other about their systems.

Not, actually, that the teasing was too sharp. Both implicitly agreed to work within a framework of equivalence: crudely put, we both have problems. As Menchikov said: "This talk is about capitalism and communism. The basic idea is that both systems are in process of reassessment."

But this is not so: the communist system has proclaimed itself in a crisis while the capitalist system proclaims itself in the best of health.

Menchikov was the more interesting for that reason. He volunteered that Soviet defence spending was something like 10 per cent of the US - that is about 14 per cent of GNP - and said it would have to be halved.

He said that would be done within four years. He admitted the capitalist world was ahead not just in the provision of goods but in democracy as well.

But he was never challenged. When he said, as an aside, that Stalin could have been more "democratic", neither Galbraith nor anyone else asked: could he? Could he hold power as a leader of a very unpopular sect and still be democratic?

So pervasive was the bonhomie that it was Galbraith who emerged as the further left of the two - chided by Menchikov, only passing in front of being asked to Ronald Reagan.

Galbraith remains, at 80, remarkably witty, a little vain, and still vastly alive - characteristics which meet their equal in the Soviet doppleganger. But the evening neither asked nor answered any hard questions. That's show business.

Soviet state sector jobs cut by 1m in 1988

By Quentin Peel in Moscow

MORE than 1.1m people lost their jobs in the state sector of the Soviet economy last year, as Mr Mikhail Gorbachev's efforts to cut the state bureaucracy began to take effect.

The figure was published at the weekend in a round-up of statistics for the Soviet economy in 1988, showing what an uphill struggle the Soviet leader's programme of perestroika, or restructuring, is facing.

In particular, the statistics underline the continuing disastrous state of Soviet agriculture, and a growing inflationary threat from rapid wage rises outstripping productivity.

The figure for the drop in state employment amounts to only 1 per cent of the 117.5m people working in public enterprises and as civil servants, but it represents a sharp acceleration in the number voluntarily or involuntarily leaving such secure employment.

In contrast, just 2m are now working in new co-operatives, or are self-employed, of whom

two-thirds are said originally to have worked in the state sector.

Another clear indication of the upheaval in Soviet employment is that 3m workers went to newly-created "job placement centres" looking for new work in the first nine months of 1988 - and only 2m could be found jobs.

What is not clear is whether all the missing 1m found jobs themselves in the fledgling private sector, or whether some remain unemployed.

The statistics were published this weekend by Goskomstat, the Soviet state statistics committee, in a review intended to reveal that the growth rate of the Soviet economy has begun to revive.

Thus the growth of Gross National Product was said last year to have reached 5 per cent, compared with an average growth of 4 per cent from 1981 to 1986 (before Mr Gorbachev became leader).

However the figures, presented in a highly selective

way, and often without adequate comparisons or definitions, are more useful for pinpointing the key problem areas in the Soviet economy.

They still do not include any indication of a price index, or inflation level, officially stated to be less than 1 per cent, although calculated by many Soviet economists as between 5 and 8 per cent. If the latter is right, then a growth rate of 5 per cent could be entirely cancelled out by inflation.

Gross agricultural production - singled out by Mr Gorbachev as his top economic priority - grew by only 0.7 per cent in 1988, according to Goskomstat. Without the reasonable performance of the livestock sector - up a modest 3.4 per cent - it would have actually declined.

Not only was the grain harvest down to 196m tonnes, a figure revealed last week, but the potato crop also slumped from an annual average of 76m tonnes to only 67m. Vegetable and fruit production was

also down.

The crucial problem for Mr Gorbachev is that in those areas where he is succeeding in getting some improvement, increased consumer demand immediately absorbs any increase, and shortages in the shops remain chronic.

Thus production of colour television sets was up 22 per cent, but they are virtually unobtainable, and 63 per cent more video recorders were produced to reach the tiny total production figure of just 72,900 machines for the 265m population.

On the wages front, average monthly income in the state sector shot up by 7 per cent, compared with a plan target of only 1.9 per cent. Labour productivity only increased by 5.1 per cent.

Goskomstat reveals that 3m workers in the Soviet Union still have a monthly wage below rubles 80 a month (273) compared with an average wage of factory and office workers of rubles 217.

Madrid poised for union concessions

By Peter Bruce in Madrid

THE SPANISH Government seems poised to make significant concessions to the country's two main trade unions in talks tomorrow evening. These represent an effort to head off more damaging political unrest after a successful 24-hour general strike last month.

Both the Government and the unions have cooled their heels since the socialist UGT and the communist CCOO, have warned that, unless agreement on a series of post-strike demands is reached by the end of this month, they would stop talking to each other.

The meeting tomorrow will take place amid constant speculation that, in the absence of a pact, Mr Felipe Gonzalez, the Prime Minister, might be forced to call an early election, even if that meant disrupting Spain's current presidency of the European Community. Supporters of an early poll - who include Mr Gonzalez's deputy, Mr Alfonso Guerra - argue that waiting until after the presidency and after the European Parliament elections in June would leave the Government in a worse position than it has now.

However, some ministers say the Socialist Party cannot be sure of holding its parliam-

entary majority. The successful congress of the main conservative opposition group, the Popular Alliance, at the weekend will also concentrate the Government's mind. The alliance elected its founder, Mr Manuel Fraga, as party leader after a two-year absence and appears to have found a candidate to challenge Mr Gonzalez, in Mr Marcelino Oreja, a former Foreign Minister. The Alliance has changed its name to People's Party (Partido Popular) and is trying to woo Christian Democrats, and a former Prime Minister, into a centre-right electoral pact.

For all that, a stronger right-wing opposition might make it easier for Mr Gonzalez to settle with the unions on his left.

Mr Carlos Solchaga, Finance Minister, said at the weekend that the Government would make new offers to the unions tomorrow. So far, the Government has responded to union demands - including higher pensions and wider unemployment coverage - with offers worth about Pts 250m (21.1bn). The unions have costed their demands at Pts 420m.

Mr Solchaga even hinted that the Government's 3 per cent inflation target for this year was not inviolable.

Zambia 'to resume ties with IMF'

By Jim Jones in Johannesburg

PRESIDENT Kenneth Kaunda has accepted an offer by the International Monetary Fund to resume an economic restructuring programme in the country, *Reuters* reports from Lusaka.

In an interview with US reporters, he said an accord with the IMF followed what he described as the latter's "flexible stance toward needy countries."

Mr Kaunda said the fund would assist with economic reforms adopted by his government since he severed ties with the IMF in May 1987.

"They made soundings that they want to come back and we said: 'Yes, we are ready,'" Mr Kaunda added. "This should be on our own terms and they [the fund] should only come to help us do what we are already doing."

Several senior IMF and World Bank officials, based in the US, visited Zambia in recent months to negotiate resumed assistance and loan facilities.

Last year, the Government cut state subsidies on some essential commodities and removed price controls on certain items to prepare the way for rapprochement with the fund.

When Zambia cut its ties with the IMF, the Government said the fund's economic adjustment programme was too harsh. It had called for a big devaluation.

Four-nation talks on Namibia begin

By Jim Jones in Johannesburg

THE FOUR-nation Joint Monitoring Commission (JMC) overseeing settlements in Angola and Namibia has begun its first round of meetings in New York to discuss the practical implementation of the peace agreements.

In Pretoria, a foreign affairs spokesman said there was no fixed agenda for the New York meeting between representatives of South Africa, Angola, Cuba and the US. But he added that arrangements had to be made for the deployment of UNtag, the 300-strong international group which is to ensure the fairness of pre-independence elections in Namibia. Arrangements have also to be made to receive Swapo (South West Africa People's Organisation) cadres returning to Namibia from Angola.

UNtag's financing remains in doubt. Pretoria has declined the contributions saying it is a UN responsibility, and budget considerations may oblige UNtag to play a more restricted part in Namibia's independence process than had been envisaged.

South Africa is likely to raise the question of monitoring the 27-month withdrawal of Cuban troops from Angola. Earlier this year, General Ferreira Gomes, the Brazilian head of the international team overseeing Cuba's withdrawal, upset Pretoria by saying verification would be based on trust.

Oil drilling experts fight to avert N Sea blow-out

By Karen Fosell in Oslo

EXPERTS are working to arrest the potential for a blow-out (an oil and gas explosion) in an oil exploration well which was being drilled in the North Sea by Saga Petroleum, Norway's largest independent oil company.

The well is in an area about nine miles from the Albuskjell oil platform, one of seven fields in the Ekofisk oil and gas production area, which accounts for 30 per cent of Norway's total oil production.

The exploration well was being drilled from a semi-submersible mobile drilling unit in the southern part of the Norwegian North Sea when problems were encountered from a high-pressure geological formation.

More than half the crew on the drilling unit had to be evacuated and the rig moved 150 metres from the well.

Experts are considering what precautions to take to

stabilise the well so as to prevent oil and gas leaking.

An official of the Norwegian Petroleum Directorate (NPD), Norway's watchdog over oil activities, said that, "technically, the situation is not under full control", and it could "take weeks or months" to rein it in.

A worst-case scenario could force production from part of Ekofisk to be shut down during oil spill cleaning.

An executive with Phillips Petroleum, operator of Ekofisk, said: "If a risk is posed to lives on Ekofisk, we would not hesitate to shut down."

Officials would not be drawn on qualifying the potential for a blow-out, but said that, over time, pressure in the well, now closed, could rise or die.

Staff at SFT, Norway's pollution watchdog, have used an oil spill model which showed that pollution could spread to Denmark, where other oil and gas installations are located.

Published by the Financial Times (Group) Ltd, Frankfurt Branch, represented by E. F. F. Frankfort/Main, and by E. F. F. Frankfort/Main, F. Berlin, R.A.F. München, G.T.A. Dusseldorf, M.C. Garmisch, D.F.P. Palermo, London, Printer: Frankfurt Societäts-Druckerei-GmbH, Frankfurt/Main. Responsible editor: Dr Geoffrey Owen, 10, Abchurch Lane, Bankers House, Cannon Street, London EC4A 3DF. The Financial Times Ltd, 1989.

FINANCIAL TIMES, USPS No. 190540, published daily except Sundays and holidays. US subscription rates \$25.00 per annum. Second class postage and at New York NY set at additional mailing office. POSTMASTER: send address change to FINANCIAL TIMES, 10, Abchurch Lane, New York, NY 10022.

FINANCIAL TIMES (Scandinavia) Ltd, Ostergade 44, Copenhagen.

HANDS UP THE ONE INTERNATIONAL BANK IN NEW YORK WITH A BRITISH PEDIGREE AND SCANDINAVIAN STYLE

What could be more fitting for the world's most cosmopolitan centre than the arrival of the Scandinavian Bank Group. As one of the leading British merchant banks we're now the first in New York to establish a capital markets led operation.

British by birth, but with powerful Scandinavian parentage, the Group offers market-proven expertise in the dynamics of investment banking and international treasury management. More than that, we recognise that a bank is a partner to its clients and that means taking a pro-active approach.

If you're looking for renewed vigour in financial engineering, seek new horizons in swaps and options, or wish to deal with us as a major market maker in Scandinavian currencies, call us. As Britain's first bank to be granted an A1 Standard and Poors rating, (and a lot of other "firsts" besides) you can be sure we're the first to put you first.

But don't be fooled by our name. While we're very much at home in Scandinavia, we've got all the right connections in Europe and around the world too. How else could we feel so welcome in New York!



Member of AFSD and TSA

The art of British banking Scandinavian style.

Scandinavian Bank Group, 780 Third Avenue, New York 10017 Tel: (212) 935 6270 Fax: (212) 935 0653

International Offices: London, Bermuda, Cayman Islands, Geneva, Hong Kong, Los Angeles, Milan, Monaco, New York, Paris, São Paulo, Singapore, Sydney, Tokyo, Zürich



OVERSEAS NEWS

Rapid growth leaves Boeing flying into turbulent weather

Roderick Oram visits the aircraft-maker's assembly plant at Everett, Washington

ONE glance at the overflowing parking lots tells you things are hopping at Boeing's Everett assembly plant. With the company rapidly hiring staff to satisfy bulging order books, cars are squeezed in everywhere.

"Oh man, it's awful," said one employee, talking about the traffic jams he would face when shifts changed on a recent afternoon.

Clogged roads look to be the only flaw in this picture-postcard setting, about 30 miles north of Seattle. Even the sprawling main assembly building, nearly half a mile wide and a third deep, seems a comprehensible size when seen against distant snow-capped peaks, front and back.

Do deeper problems lurk at Boeing plants? Regulatory officials and airline passengers are beginning to wonder. A growing list of disquieting incidents with its aircraft might indicate quality has suffered from its quick build-up in production.

So far, only 737 and 747 types of airliners from Boeing's other assembly plant at Renton, south of Seattle, have suffered - crossed wires, peeling skins and an engine that tore away on take-off.

The Everett plant, though, was thrust into the limelight at the weekend when Boeing announced it was suspending its first deliveries of the 747-400, the latest variant of the jumbo jet, because of "unexpected complexities" in making the heavily redesigned aircraft.

The news confirmed the feeling in the Seattle area that Boeing's biggest production headaches are at Everett, where it also makes the 757 type. It is trying to double the plant's annual output to 120 aircraft by next year.

Expanding production has been full of challenges for Boeing. For instance, it has had to move its 747 assembly line to make room for the 400 model. The aircraft's redesign added upturned winglets that increased its wingspan to 211 feet. This was only an extra 16 feet but enough to make the old line too cramped. Boeing will have to add a second line to meet its goal of raising output of 747s from five a month to seven by next year.

Last year, Boeing transferred 300 senior production engineers to Everett from Renton, and still no one has a moment to spare. When the aerospace section of the Ameri-



can Institute of Industrial Engineers asked to tour Everett next month, when they would be in Seattle for its annual meeting, Boeing said the section would have to see another plant because engineers were too busy to show visitors around.

To step up output is like the mass start of a marathon: one trip can bring score of runners to the ground, Mr Phil Comdit, executive vice-president in charge of production, said last November when announcing new schedules. "If one guy doesn't make it, you've got a

problem." Everett has 16,200 employees and hiring continues apace, according to local union and civic leaders.

"If everything were working just right we could produce a lot more airplanes with the same number of people," a senior Boeing strategist said last month. But it is not so, to meet its production goals, Boeing Commercial Airplanes, the company's airliner subsidiary, increased its staff by 28 per cent to 56,600 in the past two years.

"There's been an awful lot of skill dilution to the rapid build-up of the

payroll," the strategist added.

Boeing much prefers to hire skilled aerospace workers but, with the local supply dwindling, it has turned increasingly to other fields. Thanks to higher pay, it draws electricians and sheet-metal workers, for example, from Seattle building sites and shipyards, and gives them five weeks of training for aircraft building.

"It used to be that Bob was hired and trained by Sam, and then Bob trained Bill... and 13 generations later the piece of work didn't quite

end up how it started," an Everett employee said.

To tackle that problem, Boeing set up a Skills Process Centre at the Everett plant, where new workers practise on a stripped-down front section of an old 727 airliner. "It's a very successful programme. It has cut very dramatically the time it takes to get someone onto the shop floor," the employee added.

Even with thousands of new employees, Boeing is still demanding gruelling overtime from its staff. Since its unions complained about excessive hours last summer, Boeing is sticking to its labour contracts. Even so, an assembly line worker is allowed to put in 300 hours of overtime a quarter, or work up to seven successive weeks without a day off.

In another move to alleviate pressure, Boeing is phasing out refurbishment work. A pair of All-Nippon Airways 747s may be the last aircraft to come back to Everett until the boom has faded.

"I've seen these quality and overtime symptoms before," said a University of Washington professor of engineering with close ties to Boeing. "They've pulled it off in previ-

ous booms but it remains to be seen whether they've stretched too thin this time."

Besides the strain of overtime, several hundred employees at Boeing's Auburn parts plant, south of Seattle, suffered health problems last year, prompting a Senate investigation.

The workers reported memory loss, irritability, blood in their urine and other symptoms. The cause was traced to fumes from phenolic materials used to make plastic parts for airliner interiors. Boeing improved the plant's ventilation system and cut use of the suspect ingredients.

Once visitors have picked their way through Everett's crowded car parks, one of the first things they see outside the main assembly building is a fatigue test stand where airframes are subjected to stress until they break. Boeing has drawn a heavy nylon curtain around the stand to protect passers-by from flying rivets.

If pressure on its resources continues to rise, Boeing might have to consider protective wrapping for its plants at Everett, Renton, Auburn and other places before they burst at the seams.

Brazilian Congress recalled for debate on inflation package

By Ivo Dawson in Rio de Janeiro

THE BRAZILIAN Congress has been recalled from its summer recess for an emergency sitting, starting today, to debate President José Sarney's latest anti-inflation package. If Congress does not approve it by February 15, the measures will lapse, threatening a new surge of hyperinflation.

Senior congressional leaders look certain to refuse to discuss the hottest political potato among the measures - the dismissal of up to 90,000 civil servants.

The price freeze, the end to inflation-indexing of the economy, and new federal spending restraints, are almost certainly more important in the president's Summer Plan, the sackings have become a test of the Government's commitment to cut deeply into its bureaucracy.

Analysts in Brazil and abroad were critical of Mr Sarney last week when he unexpectedly shifted responsibility for the controversial decision

from his own office at the Planalto Palace to a congressional vote.

Justifying the change, Mr Santo Ramos, the president's legal adviser, said the country's new constitution demanded congressional approval of the move. Others argue, however, that the Government is simply passing the buck, knowing that Deputies and Senators will shy away from dismissing officials unprotected by job security laws, as many are their own political appointees.

The row has stirred up a heated legal debate, with lawyers for the civil servants under threat arguing that "no just cause" for their removal has yet been established. Those arguing for a radical reduction in the size of the government machine counter that many more public functionaries must be given their notice if the country is to take seriously the administration's promise to reduce its budget deficit to zero

in the current year.

Most analysts believe Congress will approve the main package of measures, while insisting that responsibility for the success of the plan lies firmly with the president's office.

Mr Ulysses Guimarães, chairman of the House of Representatives, has ruled that the measures can only be approved or rejected. If they are thrown out, most economists believe a new, potentially disastrous, inflationary surge would be inevitable.

Inflation in January is believed to have exceeded 40 per cent so far, according to unofficial estimates.

Mr Orlando Galvão, a 48-year-old economist, has been appointed the new president of Petrobrás, Brazil's state-owned oil company. He succeeds Mr Armando Guedes, who resigned in December after a row over bribery allegations against executives in the company's distribution subsidiary.

Managua offers US olive branch

By Tim Coome in Managua

NICARAGUA has accepted the appointment of nine new US embassy staff in Managua, in a diplomatic gesture on Friday.

The move is seen as a clear signal to Washington that Managua wishes to achieve a better relationship with the incoming Bush administration, so as to attain a political accommodation between the two governments.

President Ronald Reagan, who left office on Friday, had said he intended to have the Sandinistas out of power before he went.

Making the announcement, Mr Miguel d'Escoto, Nicara-

guan Foreign Minister, said: "I hope this will be the beginning of a normalisation of relations."

He said Nicaragua had also dropped the stipulation that all visiting US government officials request visas 15 days in advance. They will now be granted immediately.

Diplomatic relations between Washington and Managua reached their lowest ebb last July, following Nicaragua's expulsion of Mr Richard Melton, US ambassador, with seven other US diplomats, for alleged interference in Nicaraguan political affairs.

The expulsions followed a violent confrontation between police and demonstrators in the small town of Nandaime. The Nicaraguan Government claimed the incident had been instigated by the US embassy. Washington responded by expelling Mr Carlos Tunnerman, Nicaraguan ambassador to the US, and seven other Nicaraguan embassy staff.

Since the expulsions, both governments have been carrying out tit-for-tat denials or delays in authorising visas to visiting government officials. This has proved particularly cumbersome for Nicaragua.

Newfoundland PM quits

By Robert Gibbons in Montreal

MR BRIAN PECKFORD, 46, the fiery Canadian crusader who led the provincial Tories through three successful elections, is resigning as premier of Newfoundland and heading for the private sector.

His decision ends several months of speculation about his taking a senior position in industry. Though he reached agreement with the federal government for development of the CStn (St. John's) offshore oilfield, he has run into severe criticism for ploughing C\$15m of taxpayers' funds into

a disastrous commercial greenhouse project.

Mr Peckford, a former school teacher, became premier in 1979. He promised "a revolution between the ears" to make Newfoundland an equal partner in the confederation, based on the province's offshore oil resources.

Several Tory provincial MPs have ambitions to follow Mr Peckford in office, though a movement is under way to persuade Mr John Crosbie, the federal Trade Minister, to take over.

Bush prepares for early tests

By Lionel Barber in Washington

PRESIDENT George Bush yesterday ended five frenetic days of inaugural festivities and said he was ready to get down to serious work.

Mr Bush will begin with a Cabinet meeting today, and tomorrow the new president has invited congressional leaders to the White House to discuss the budget and foreign policy.

The meeting will provide an early test for Mr Bush, who has called repeatedly for "bipartisanship" with the Democratic-controlled Congress. The Democratic leadership has responded favourably, if a little warily, because of the expected clash over the budget.

The first few days in office

are not expected to produce new initiatives, though several reviews are under way, including studies of defence budget priorities and of US-Soviet relations.

Mr John Sununu, White House chief of staff, yesterday reaffirmed the administration's opposition to new taxes as a means of cutting the federal deficit, and predicted that the budget talks would be "spirited and lively".

But he said the problem of the \$155bn deficit was "not arithmetic but politics", adding that Congress would be able to share the credit for dealing with it.

Mr Sununu said Mr Bush would demonstrate that "a

conservative president can be compassionate".

This theme was picked up in several newspaper editorials yesterday, which praised Mr Bush for his conciliatory inaugural address and for his pledge to help the less fortunate.

Mr Bush, who attended final parties over the weekend including one held by a Texas society, the Black Tie and Boots, said: "I can't wait to get to work. I mean serious work."

Yesterday, in the final act of the five-day celebrations, Mr Bush attended an ecumenical church service, where he received blessings from Catholic, Protestant, Jewish and Greek Orthodox clergy.



And for businesswomen who aren't just married to their work we offer exactly the same thing.

Because, understandably, continual trips abroad can put a considerable strain on a relationship.

EVEN

Another trip to Dubai, then another and another...

But now Emirates have put you in a position to say "You're coming with me".

And to think all you have to do is to buy one first or

TIME

business class return ticket to Dubai, from London.

As long as that ticket's been bought in Britain and you've taken the trip, you'll get a free transferable economy ticket to use on your next.

FLIES

A return ticket that's valid for twelve months.

So, thanks to Emirates (and Dubai's excellent position as far as connecting flights are concerned - a stepping stone to India and the Maldives for

ON

example) it looks as though a business trip is about to turn into an unexpected holiday for two.

Phone 01-930 5356 or contact your local travel agent.

Emirates

125 Pall Mall, London SW1

New Increased Interest Rates

From 1st February 1989 the rates of interest payable on Portman investment accounts will be increased. The new rates will be as follows:

	Net % (paid annually)	Gross Equivalent % (at 25% tax)
FIXED RATE BOND	10.00	13.33
PREMIUM-PLUS SHARES		
Balance £20,000+	9.75	13.00
Balance £5,000+	9.25	12.33
Balance £1+	8.75	11.67
FLEXI-PLUS SHARES		
Balance £20,000+	9.25 (9.00)	12.33 (12.00)
Balance £5,000+	8.75 (8.50)	11.67 (11.33)
Balance £500+	8.25	11.00
Balance £1+	8.00	8.00
YOUNG GENERATION CLUB	8.25	11.00
REGULAR SAVINGS SHARES	8.00	10.67
ORDINARY SHARES†	6.00	8.00
DEPOSIT ACCOUNT†	5.75	7.67
COMPANIES ACCOUNT	9.19	12.25
INTERNATIONAL ACCOUNT	paid gross	12.50
CHARITIES ACCOUNT	paid gross	12.50
GOLD SEAL SHARES (2nd issue - closed)		
Balance £20,000+	9.80	13.07
Balance £2,000+	9.60	12.80

Monthly income rates in brackets where appropriate. † Interest paid half-yearly. The rates of interest on all other current and discontinued investment accounts will be increased by 0.5% from 1st February 1989. Full details of our complete investment range may be obtained from any Portman branch or by completing the coupon and sending to the FREEPOST address below.

PORTMAN BUILDING SOCIETY

Please send me details of the Portman investment range

Name _____

Address _____

Post Code _____

Portman House, Richmond Hill, FREEPOST, Bournemouth, BH2 6TB
A Member of the Building Societies' Association. Assets exceed £600 million.

OVERSEAS NEWS

Gandhi close to Tamil poll defeat

By David Housego in New Delhi

MR RAJIV Gandhi, Indian Prime Minister, was heading for a humiliating defeat last night in assembly elections in the southern state of Tamil Nadu, where he had staked his personal prestige by campaigning intensively.

Early results showed his Congress Party third in terms of seats in the new assembly. The regionalist Tamil party, the Dravida Munnetra Kazhagam (DMK), seemed likely to win a landslide victory with an absolute majority of seats.

The second largest number of seats was going to a faction of a rival regional party, the All-India Anna DMK, under the Tamil film actress Jayalalitha.

The potential scale of the defeat - with Congress ahead in only 28 constituencies, against 148 for the DMK - rules out the possibility of Mr Gandhi calling an early general election.

It also provides a psychological fillip for the opposition parties which have formed a National Front coalition, of which Mr M Karunanidhi, the DMK leader and a former Chief Minister of Tamil Nadu, was a founder.

The setback for Mr Gandhi follows another reverse over the weekend with a corruption scandal that could force the resignation of Mr Arjun Singh, Chief Minister of Madhya Pradesh, who used to be one of his closest associates.

Mr Arjun Singh was told last night by Congress Party leaders to step down.

The state high court used unusually strong terms in calling on the chief minister to explain how he had acquired the funds to build a large mansion near the state capital, Bhopal. The high court said Arjun Singh "has to clear the

cloud, in the public interest, in order to cleanse the atmosphere, which is vitiated and polluted."

The court also called for an inquiry into the financial affairs of the Children's Welfare Society, run by Mr Singh's son, which had raised many millions of rupees through public lotteries. Of 12 held, the first prizes remained unclaimed in 10. The scandal is damaging to Mr Gandhi and the Congress Party because the opposition has made corruption central in its attacks on the administration.

Mr Arjun Singh was a close adviser of Mr Gandhi over the Punjab before becoming governor of the Punjab and then a central government minister.

Part of the evidence against him in the lottery case has come from another Congress member, Mr Motilal Vora, the Health Minister. This reflects the divisions in the party.

In the Tamil Nadu election, Mr Gandhi campaigned intensively in the hope of building up Congress strength in the south and winning enough seats to give the party a chance of participating in a coalition state government. The party's performance puts both objectives out of reach.

Mr Gandhi visited the state nine times during the campaign, touring all the constituencies and making more than 300 speeches.

The defeat is bound to call into question his judgment in not seeking an alliance with one of the Tamil parties.

Of the 234 seats in the state assembly, the DMK was last night ahead in 140, Jayalalitha's wing of the AIADMK in 32 and Congress in 28.

Hong Kong Basic Law inquiry welcomed

By John Elliott in Hong Kong

LEADING politicians in Hong Kong hope a proposed inquiry into the UK's handling of the return of the colony to Chinese sovereignty in 1997 will counteract Beijing's move to increase democracy and help to arouse local interest in the issues involved.

The announcement last Friday of a British House of Commons Foreign Affairs Committee inquiry, which will take place in the next few months, coincides with growing concern in Hong Kong that the second draft of the post-1997 Basic Law will not contain other economic provisions for the development of democracy.

There has been local criticism of the UK's allegedly lethargic stand.

"I am disappointed in a lot of what is in the draft and it is politically important at this time for the UK to be seen to be taking an interest," said Mr Allen Lee, the senior member of the colony's Legislative Council.

The draft was settled at a meeting in the south Chinese city of Canton a week ago and is to be approved by a standing committee of Peking's National People's Congress in a few weeks before being published for a further period of consultation.

Conservative representatives of Hong Kong's business establishment initiated amendments in Canton which could slow the introduction of democratic elections for the new legislature and for the chief executive who will replace the present governor.

This has been condemned by a wide cross-section of Hong Kong's public opinion in the past week.

EC likely to hold fire in hormone trade war

By Tim Dickson in Brussels

THE European Community will decide today to hold its fire rather than exacerbate the simmering trade war with the US over hormones in American meat.

In a gesture designed to cool transatlantic tensions, while demonstrating the continuing strength of the EC's resolve, foreign ministers of the 12 are expected to confirm details of new trade sanctions against Washington but to refrain from the moment from implementing them.

So the meeting today in Brussels should mark the start of a badly needed breathing space in the dispute, which flared on January 1 when Washington responded to the EC's ban on almost \$100m (£55.5m) a year of its hormone-treated meat with a 100 per cent duty on an equivalent amount of food imports from the EC.

The crisis quickly threatened to get out of hand when EC ambassadors approved the European Commission's proposal to hit back by targeting \$66m of US walnuts and dried fruit.

The Foreign Affairs Council in Brussels today will formally endorse the selection of these items, but will delay at least until the middle of next month any decision on putting such counter-retaliation measures into effect.

The current battle has its roots in the EC's decision to prohibit the use, from the beginning of 1988, of all so-called hormone implants in Community meat production, and to apply the law to US beef imports from January 1 this year. Brussels cites consumer pressure as the main reason for the move.

Washington has consistently opposed the ban, claiming it is without scientific foundation and constitutes an unfair barrier to trade.

Despite high principles held and bitter rhetoric unleashed, politicians on both sides of the Atlantic have been alarmed by the prospect of worsening of a dispute which concerns a mere drop in the \$150bn ocean of two-way transatlantic trade.

There is a feeling that the wide media attention to the matter near the turn of the year, when there was little or no scientific news, might have helped create a dangerous confrontational mood.

The view has gained ground in Brussels over the past few days that EC interests will be best served by waiting for the next Council of the General Agreement on Tariffs and Trade (GATT) on October 8, when the EC's legal challenge to Washington's retaliation of January 1 will be considered.

Britain, the Netherlands and Denmark have argued persuasively in recent meetings for this approach. Others, notably Italy, continue to make more bellicose noises.

Despite the likely lull in hostilities, there are no signs at this stage of a lasting solution to the dispute, nor of a new willingness to negotiate.

Mr Frans Andriessen, EC External Relations Commissioner, raised speculation at the European Parliament in Strasbourg last week when answering questions, he told MEPs: "In this case one does not need to exclude a scientific judgement on the 'safe' framework of the problem."

His spokesman, however, quickly denied that this should be seen as a concession, and pointed out that the Commission held its original view that any GATT panel could only examine the scientific issues in the wider context of the legal and commercial considerations.

The European Parliament is seen by many on the US side as a crucial influence if the EC is to modify the ban. A highly emotional parliamentary debate against hormones paved the way for the decision by the Council of Ministers in late-1985, so any softening of the parliament's position would be significant.

There was little sign of this in the amendment motion passed by MEPs after the debate last week, but some observers are chinging to the hope that the European parliament's current inquiry on hormones could lead to some new conclusions on the subject, and that a change of heart could follow the elections to the assembly in June.

On the European side, some see a solution in the offers from the American states of Texas, Kansas, Wyoming and Montana to meet the EC requirement for beef produced without artificial hormones.

US Government officials have attempted to play down these reports but the European Commission appears to be taking them seriously.

Foreigners begin withdrawal from Kabul

By Robin Pauley, Asia Editor

TENSION continued to mount in the frozen and hungry Afghan capital of Kabul over the weekend as embassies started to close and the resistance guerrillas refused to guarantee even the safety of Red Cross flights trying to take in medical supplies.

West Germany ordered all its nationals out and will leave its embassy with a skeleton staff of locals. International aid organisations also started ordering foreign staff to leave Afghanistan in the wake of a British warning to people to get out while flights were still available.

The British Embassy sent final warnings to more than 60 Britons and other Westerners for whom it has consular responsibility, and called British journalists in to advise them personally to leave because of worsening conditions.

The United Nations was reported to be leaving just one foreign representative in Kabul for each of its agencies. The International Red Cross asked the seven-party Mujahideen alliance based in the Pakistan border town of Peshawar to

guarantee the security of a flight it is planning for tomorrow to deliver urgently-needed medical and surgical supplies for Kabul and the eastern city of Herat. The alliance refused.

The search among Afghan groups for agreement on the political future of the country received a further setback yesterday when four leaders based in Iran rejected a plan by the seven Pakistan-based groups to set up a *shura* (assembly or council) to consider an interim government for Afghanistan.

The Pakistan groups were locked in meetings all weekend trying to work out the composition of a future government.

A senior Soviet commander acknowledged yesterday that Moscow was ending its nine-year war, intended to bolster Afghanistan's Marxist Government, with a sense of failure.

"We have not succeeded in everything we planned to do here," said Major General Lev Severov, political officer at the Soviet military high command in Kabul.

He also said the final phase of the Soviet withdrawal, due to be completed by February 15, had not yet begun.

SHIPPING REPORT Gulf VLCC rates soften

By Kevin Brown, Transport Correspondent

DEMAND remained steady in the tanker markets last week, but Very Large Crude Carrier (VLCC) rates softened in the Gulf because of a build-up of available tonnage.

Brokers said one charterer seeking cover for a 260,000-ton stem from the Gulf to the West received 10 offers before fixing at New Worldscale 46 - down from about Worldscale 59 for a similar trip a week earlier.

For the shorter haul from the Gulf to Japan, a Japanese charterer fixed a cargo of 240,000 tons at Worldscale 49.5, and Tokyo Tankers fixed a cargo of 200,000 tons at Worldscale 42.5. VLCC rates in the previous week were around Worldscale 59-62.

There was a shortage of smaller cargoes, leading to favourable rates for charterers. Texaco concluded 80,000 tons from the Gulf to the East at Worldscale 110.

WORLD ECONOMIC INDICATORS				
FOREIGN EXCHANGE RESERVES (US\$m)				
	Nov '88	Oct '88	Sept '88	Nov '87
US	17,262	19,803	18,015	14,391
UK	41,053	38,332	36,833	34,124
W Germany	56,313	54,540	52,705	70,421
Japan	89,964	85,502	84,445	72,236
Belgium	3,269	7,982	7,594	8,080
Netherlands	15,225	14,945	13,125	13,671
Italy	51,903	29,318	28,888	26,156
France	23,194	25,335	26,320	27,685

Malaysia sells cars

Malaysia's national car company, Proton, will begin to sell its cars in the UK next month, the company said. Reuters reports from Kuala Lumpur.

The company (70 per cent state-owned) is to ship 1,000 cars to Bristol for distribution by Proton Cars UK.

Hopes rise on farm reforms

By Tim Dixon in Brussels

HOPES WERE rising in Brussels at the weekend that a wide-ranging package of farm policy reforms - including changes to the European Community's beef regime and a radical new scheme for direct income payments to poorer producers - will be agreed at the meeting this week of agriculture ministers.

A deal on the package of six related issues, which have dominated EC farm councils over the last six months, would clear the way for the first negotiations on farm price proposals for this year, announced by the European Commission last week.

The main reservations (as the meeting last month) are still held by France over details of the direct income aid plan, and by Britain and Ireland over different aspects of the proposed reform of the EC's system of beef support.

It is understood, however, that Mr Ray MacSharry of Ireland, the new Farm Commissioner, has some way to go to meeting his country's concern that the planned price support mechanisms do not provide an adequate safety net for producers, while the process of exceeding competitive-ness. "They know they have no chances in other markets if they are below the high standards accepted elsewhere," he said.

For West German companies, the main benefit of EC standardisation is the economic advantage that can be produced more efficiently and on a larger scale," says Mr Siegfried Gelsdorf of its product management division.

He welcomes the ending of the widely differing standards that existed between European states - and fortunately for West German producers, the European rules turned out to be similar to their own existing rules. "We haven't had to give up too much," said Mr Gelsdorf.

West Germany is trying equally hard to influence common EC requirements for construction products, adopted by member states last month and now awaiting transformation into technical standards at Cen.

Thereafter, building products would either have to conform with Cen standards or prove that they conform with other standards that fit the EC requirements. About 100 different rules for cement alone now exist across Europe. These should be cut to about 20, say DIN officials.

Meanwhile, as in all directives on standardisation that stem from the new approach, member states are obliged to accept each other's regulations so long as they conform with the basic EC requirements.

It is no surprise that West Germany will be pushing again for its standards to be adopted as the EC norm in this process. It all goes to show that national interests still play a big part - and no doubt always will - in European standardisation.

AT BARCLAYS 1992 HAS ALREADY STARTED.

No one can afford to ignore the dramatic implications of 1992. The Single European Market. The removal of tariffs. 320 million potential customers.

But it may be difficult to see exactly how your business can take advantage. That's where we can help. With experts on everything from electronic cash management to international finance. From cross border leasing to exchange risk management.

To give you all the specialist advice you need. We've also been established in Europe for many years. So we'll have someone on hand to help, wherever you decide to trade.

But you don't have to go abroad to draw on our wealth of experience. As we've now set up Business Centres all over the UK. And with 327 in total, that's more than any other bank. We can make 1992 work for you. If you start work on it now. By filling in the coupon. Or calling into your local Barclays Business Centre.

Please send me details of my nearest Barclays Business Centre.

Name _____

Company _____

Address _____

FT2502

POST THIS COUPON TO: BARCLAYS INFORMATION CENTRE, PO BOX NO. 163, WEYBRIDGE, SURREY KT13 0JH. OR FREE-PHONE 0800 282130.

MEMBER OF I.M.C.O.

Measuring up to high standards

Andrew Fisher on the EC fight for common technical requirements

THE setting of common technical requirements for industrial goods sounds a deceptively mundane note in the grand vision of Europe's single market.

Yet progress on the matter is a central part of attaining that dream. An important key to its success or failure lies in the hands of the influential West German standards authorities, which are preparing the ground for the next battle for influence in European standardisation.

Common EC standards should save manufacturers the huge costs of adjusting product designs to the rules of 12 different national standards bodies, identified by the European Commission as one of the biggest hindrances to cross-border trade.

No member state knows that better than West Germany, often accused by its EC partners of using high technical standards to erect non-tariff barriers against cheaper and lower-quality foreign goods, and of trying too hard to impose its own norms on the rest of the Community.

The body at the heart of the standards debate between West Germany and the rest of the Community is the private-sector Deutsche Institut für Normung (DIN), which has written about 20,000 different standards, more than for any other country in the EC. These are respected across the world, often conferring an automatic quality advantage in export markets on the West German goods which bear them.

Mr Helmut Reihlen, director of the Berlin-based DIN, makes no secret of the fact that standards can be just as much instruments of industrial policy as guardians of health and safety. "They are a competitive tool," he says. But they continue to be a serious challenge, as well as an opportunity, to exporters.

West Germany's experience shows why the EC's campaign for common technical requirements is unlikely to meet its goal of creating mutually acceptable national standards across Europe by 1992. DIN plays a dominant role in this work, as head of 40 per cent of the EC committees for setting technical standards - the same as the French and British combined.

West Germany provided the European Commission's inspiration for the current approach to EC standardisation, as a defendant in the European Court of Justice in Luxembourg in 1978.

A West German drinks importer had contested the fact that national authorities prevented it from importing French Cassis de Dijon blackcurrant liqueur - on the pretext that this contained insufficient alcohol by national standards.

The court's ruling that this discriminated illegally against foreign goods had very wide implications. It confirmed for the first time that under EC law, member states had to accept each other's standards so long as health and safety were not threatened.

That gave Brussels the legal backing to abandon the old and ineffective policy of attempting to harmonise industrial standards around a detailed EC norm. It was hoped to be a simple and swift process.

Instead, the so-called new approach stipulates that goods must be allowed free access so long as they conform with basic safety and performance requirements, to be expressed as standards by national and European authorities.

The challenge, as West German experience shows, is getting that seemingly elegant idea to work in practice. It is one thing to enter the West German market under Euro rules, but quite another to satisfy the stringent requirements of retailers and distributors, which unlike public authorities are free under EC trade law to demand from suppliers any standards they like.

Several UK companies doing business in West Germany said they had no trouble adapting to DIN standards, especially since those set by the British Standards Institute were at least as tough. But they still had to observe extra, purely national standards, at the insistence of retailers and distributors.

Mr Paddy Hopkirk, former rally driver and joint owner of Mill Automotive Group, agreed that the West German seal of technical approval was a vital selling point. "You're dead over there without it," he said. Thus, Mill ensures its exports are passed by the Technische Überwachungs-Verein, even when it is not legally obliged

to do so on safety grounds.

Another example is Unipart, the UK motor parts supplier, which said its products meet and mostly exceed standards demanded by any country's car-makers. Yet the trend towards mutual recognition in the EC is something that Reihlen appears committed to European standardisation as an important way of improving industrial efficiency and quality across the Community.

"If you have one standard for a number of countries, this helps the process of rationalisation," he says. He points to the interest shown by less technically advanced countries such as Spain in using European standards to improve their own export competitiveness. "They know they have no chances in other markets if they are below the high standards accepted elsewhere," he said.

For West German companies, the main benefit of EC standardisation is the economic advantage that can be produced more efficiently and on a larger scale," says Mr Siegfried Gelsdorf of its product management division.

He welcomes the ending of the widely differing standards that existed between European states - and fortunately for West German producers, the European rules turned out to be similar to their own existing rules. "We haven't had to give up too much," said Mr Gelsdorf.

West Germany is trying equally hard to influence common EC requirements for construction products, adopted by member states last month and now awaiting transformation into technical standards at Cen.

Thereafter, building products would either have to conform with Cen standards or prove that they conform with other standards that fit the EC requirements. About 100 different rules for cement alone now exist across Europe. These should be cut to about 20, say DIN officials.

Meanwhile, as in all directives on standardisation that stem from the new approach, member states are obliged to accept each other's regulations so long as they conform with the basic EC requirements.

It is no surprise that West Germany will be pushing again for its standards to be adopted as the EC norm in this process. It all goes to show that national interests still play a big part - and no doubt always will - in European standardisation.



Reihlen: competitive quality

UK NEWS

Labour may look to credit controls for spending curb

By Philip Stephens, Political Editor

The Labour Party's shadow cabinet is to consider making the reintroduction of direct credit controls a key plank of an economic strategy to rebalance economic growth towards investment and away from consumption.

A confidential paper submitted to the Labour leadership by Mr Bryan Gould, the party's trade and industry spokesman, argues that both the political and practical objections to credit controls are readily answerable.

It adds that by making the case for targeted restraint of credit sources of credit - particularly mortgage lending - Labour can claim convincingly that the high interest rates imposed by Mr Nigel Lawson, the Chancellor, are unnecessary.

Unrest in the Conservative Party about the damage high interest rates have inflicted on industry and the trade balance would also allow Labour to deflect the government attacks which would follow a decision to advocate credit controls.

The paper says that to be politically acceptable future credit controls would have to avoid the resentment generated by hire-purchase controls in the past, particularly among low-income groups.

"This means credit controls which will not make hire purchase more expensive or take away people's credit cards, but which rather concentrate on the financial institutions whose lending has fuelled the

borrowing binge," Mr Gould says.

Such constraints could involve a combination of balance sheet controls, similar to those operated under the "curse" in the 1970s, and tax penalties on financial institutions to restrict excessive lending.

In particular, the measures would aim to limit mortgage lending strictly to genuine house purchases to avoid the massive leakage of such funds into general consumer spending.

The paper says that targeted mortgage lending works against first-time buyers, because the subsequent rise in house prices pushes homes out of their reach. One option would therefore be to restrict borrowing by existing owners to a lower multiple of earnings.

That would reduce the incentive for equity withdrawal from the housing market.

A smaller reform, which could be introduced with "political and practical advantages", would be to impose limits on the cheap housing finance enjoyed by employees of City institutions.

Mr Gould acknowledges that the transformation and internationalisation of financial markets during the 1980s would result inevitably in some leakage from such controls, as lending moved offshore. The paper insists, however, that carefully-drawn constraints would be "substantially effective."

Interest rate cut 'unlikely'

By Terry Byland

THE VIEW of many analysts in the City of London that British interest rates are unlikely to be cut before Budget week is reinforced in the latest edition of the UK Financial Bulletin, published today by NatWest Capital Markets.

Mr Stephen Hamish, chief economist for NatWest Group Treasury and Capital Markets, is bullish on domestic interest rates. But he believes that "Mr

Lawson cannot afford to take inflationary risks."

Underpinning the bulletin's view on interest rates is its prediction of a sharp slowdown in domestic demand during 1989, with growth down from 7% per cent to 2% per cent.

However, the inflationary risk will mean a tight Budget in March, with tax cuts of no more than £1bn, Mr Hamish argues.

Crane maker squeezed out of tourist city

Stothert & Pitt's closure highlights the dilemmas facing heavy industry in the south

STOTHERT & PITT, one of the West Country's oldest companies and a world famous name in crane manufacturing, is to be broken up and sold to release its 15-acre site in Bath for redevelopment.

Hollis Industries, the parent company, says that the sale is the only way it can realise sufficient capital to maintain the repayment schedule on a £280m bank loan. The loan was negotiated to allow its £105.95m management buy-out of the engineering interests of Mr Robert Maxwell's Hollis Group in July last year.

The company says the site value has effectively priced Stothert & Pitt out of the market for anyone interested in taking it as a going concern in Bath.

The decision raises a question about the future of heavy industry in a local economy dominated by the service sector and tourism. The issues facing Bath are typical of those elsewhere in the south where heavy industry occupies prime development land. Stothert & Pitt is one more example of the fading blue-collar south of the divide. RICHARD DONKIN reports.

AN advertisement for the crane manufacturer Stothert & Pitt declares "pride of our past, positive of our future" in the Bath Chamber of Commerce desk diary for 1989.

The only positive thing about Stothert's future is that the company is to be broken up and sold. It is a sad day for the city's largest private employer.

The company evolved from the ironmongery business of George Stothert who, as early as 1785, was selling castings from the Coalbrookdale Ironworks in Shropshire.

The company, one of Bath's few examples of heavy industry, once employed 2,000 people; it has declined to a workforce of 580, and most of those people are expected to be made redundant.

Mrs Eileen Walkington, secretary of Bath Chamber of Commerce, described Stothert & Pitt as "like the Bank of England to the people of Bath. They thought it would always be there."

The company is known worldwide for the excellence of its engineering products. Its revolving DD2 dockside crane achieved international renown. Its vibrating roller was an important innovation in contractor's plant, another part of the business which has five separate sections.

The decision to sell Stothert has confused members of the workforce who thought that the company had overcome its financial difficulties when it was bought by the Hollis group of Mr Robert Maxwell 2 1/2 years ago.

It has also confused Bath City Council, which believed that Hollis was committed to developing the industrial base of Stothert & Pitt in Bath.

Just after the takeover in 1986 Stothert & Pitt reported pre-tax losses of £5.3m. In 1987 the company had losses of about £3m.

"We thought we had survived the bad period," said Mr Bryan Lewis, a 54-year-old fitter who started work for the company 29 years ago.

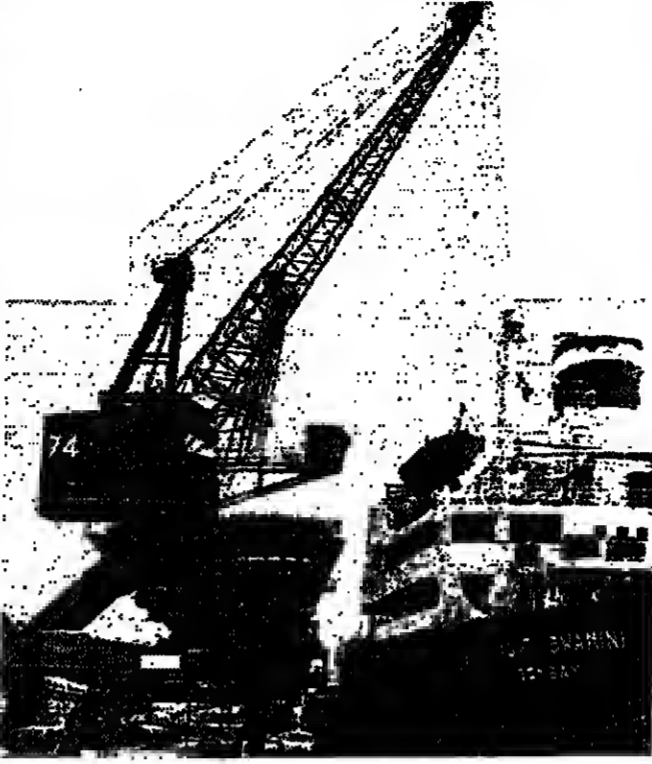
"At my age I do not expect to be one of those who keeps their job - if any of us do," he said. "I expect I'll find a job, but I doubt if it will be in my particular skill. I'm not going to leave Bath now."

Stothert is a going concern with a reasonably healthy order book, according to management. But its parent, Hollis Industries, says it needs the money it can get from selling the individual Stothert businesses and the land occupied by its Victoria works to repay a £60m loan from a banking syndicate led by Bankers Trust.

The Victoria works, which Hollis Industries is committed to close in June, occupies 15 acres of prime development land near Bath city centre. The land could realise between £4.5m and £15m, depending on the development allowed.

The loan, most of which must be paid within 2 1/2 years, allowed management to buy out the engineering interests of Mr Maxwell's Hollis group for £105.95m last July.

The rest of the finance for the deal was provided by the former parent, now known as Pergamon AGB.



A dockside crane made by Stothert & Pitt: most of the company's 580 workers face redundancy.

Mr Maxwell has no voting interest in Hollis Industries but in the event of its flotation or sale, Pergamon AGB does have share conversion options.

Those would give Mr Maxwell's company a minimum of 42 per cent and a maximum of 51 per cent of Hollis, depending on how much Hollis chooses to draw on additional finance from Pergamon. Hollis has said it will not draw on finance.

Although the figure of Mr Maxwell remains in the background, Mr Colin Robinson, the 49-year-old Hollis chief executive, is keen to exercise the Pergamon option. "Mr Maxwell was not consulted about our decision to sell Stothert & Pitt. There was no reason to do so," he said.

He said the company had asked to reschedule the debt but the bank had refused. Hollis was not quibbling about the debt, he stressed, nor was it under any pressure from the bank. "We knew what we were taking on and we know what we have to do to meet it," Mr

Robinson said.

The move has exposed a conflict about the future use of the land. Bath City Council, supported by Mr Chris Patten, the city's MP, wants the site to be used for industrial development. Heavy industrial sites are extremely rare in Bath.

Developers, on the other hand, would value the site far more if it could be used for shops, offices or houses. Hollis sees no reason why a mixed industrial and commercial development could not be allowed.

Bath City Council is in a difficult position over its planning policy, which has a presumption against out-of-town retail developments. The policy retains that it is protecting its own extensive property interests in the city centre, where it is the largest landlord. The policy clearly affects the price Hollis can obtain for the land.

In some ways Stothert can be seen as a victim of southern affluence. The land would be less of a factor if the company were based in the north-east. In addition the company has

been unable to attract the skilled workers it needs to develop its operations. House prices in Bath are very high.

It is unclear how much Hollis under its new management was committed to a future for Stothert in Bath. Mr Robinson says he originally wanted to keep Stothert as one of his core companies and points to the company's decision to recruit more draughtsmen in October.

By that time Hollis was examining the possibility of moving the company to a new site outside Bath. However, it decided this would cost at least £25m and so it dropped the idea.

Before the buy-out Hollis took on 40 apprentices and demonstrated its commitment in the company when it bought the Ipswich crane maker, Ransomes and Rapier, for £1.5m and transferred its operations to Bath in 1987.

Most of the redundant workers should be able to find other work. Bath has a healthy economy with unemployment running at between 5 and 6 per cent. But its economy is strongly orientated towards service industries, with less than 15 per cent of the workforce employed in manufacturing.

Much of its prosperity is earned from tourism, which attracts between 2m and 3m visitors every year, and the council is concerned that heavy industry is retained to maintain a balance.

Mr Clive Abbott, chief executive of Bath City Council said: "The city had a little bit of a jolt two years ago when American tourism dropped because of the bombing of Libya and the Chernobyl disaster. It demonstrated how vulnerable we would be without other industries."

The tourists do not come to see Stothert & Pitt, but Bath will not be the same without it. The large yellow Stothert offshore crane standing this week on its test housing on the south side of the River Avon looks somehow out of place in the ancient Roman city of Aquae Sulis.

Overlooking the site from the grassy north bank is one of the Georgian terraces for which Bath is famed. "Beautiful isn't it," said Mr Peter Anderson, the general sales manager of Stothert & Pitt. He was looking at the crane, of course.

Construction machinery industry realigns

By Nick Garnett

THE DECLINE of Stothert & Pitt is part of a big reshuffle in the UK construction machinery industry. Many of the older companies have slipped and shrunk, some to be resurrected under new names.

Meanwhile, new and aggressive groups have emerged. That has gone hand in hand with a long slide in the importance of the UK construction equipment sector, although there has been a jump in unit sales during the past 18 months in line with the construction boom.

In the past 18 months, Aveling Barford, a maker of dump trucks, wheel loaders and other equipment in Grantham, and the Parker stone crushing equipment business went into receivership. Barber Green closed and sold its paving machinery operation in Suffolk.

Caterpillar, which makes backhoe loaders and lift trucks in Leicester, has closed two plants in Britain.

Of the older names in the industry, only JC Bamford, the privately-owned maker of backhoes, telescopic handlers and other equipment, MF Industrial, part of the Varsity Group, and Grove Coles, the mobile crane maker, have retained their positions.

However, there has been a recent upsurge in companies that appear to be going places in the industry. Aveling Barford has been bought out by a management group which has maintained the product range.

Brown Group, which started off in manufacturing with its Moxey dump trucks, has purchased Parker and taken over Hymac, an excavator maker.

The BM group has bought the Barber Green operation, moving it to BM's Goodwin Barsby company in Leicester which makes asphalt crushers.

Terex, after a long decline, is also going through a mini-revival. Its US parent, Northwest Engineering, has shut down a plant in Ohio, moving all production of dump trucks and scrapers to Scotland.

At the same time, DJB, which makes articulated dump trucks for Caterpillar, has also begun production of rough terrain forklifts.

SIEMENS

When it comes to solving communications problems, Siemens takes the biscuit.

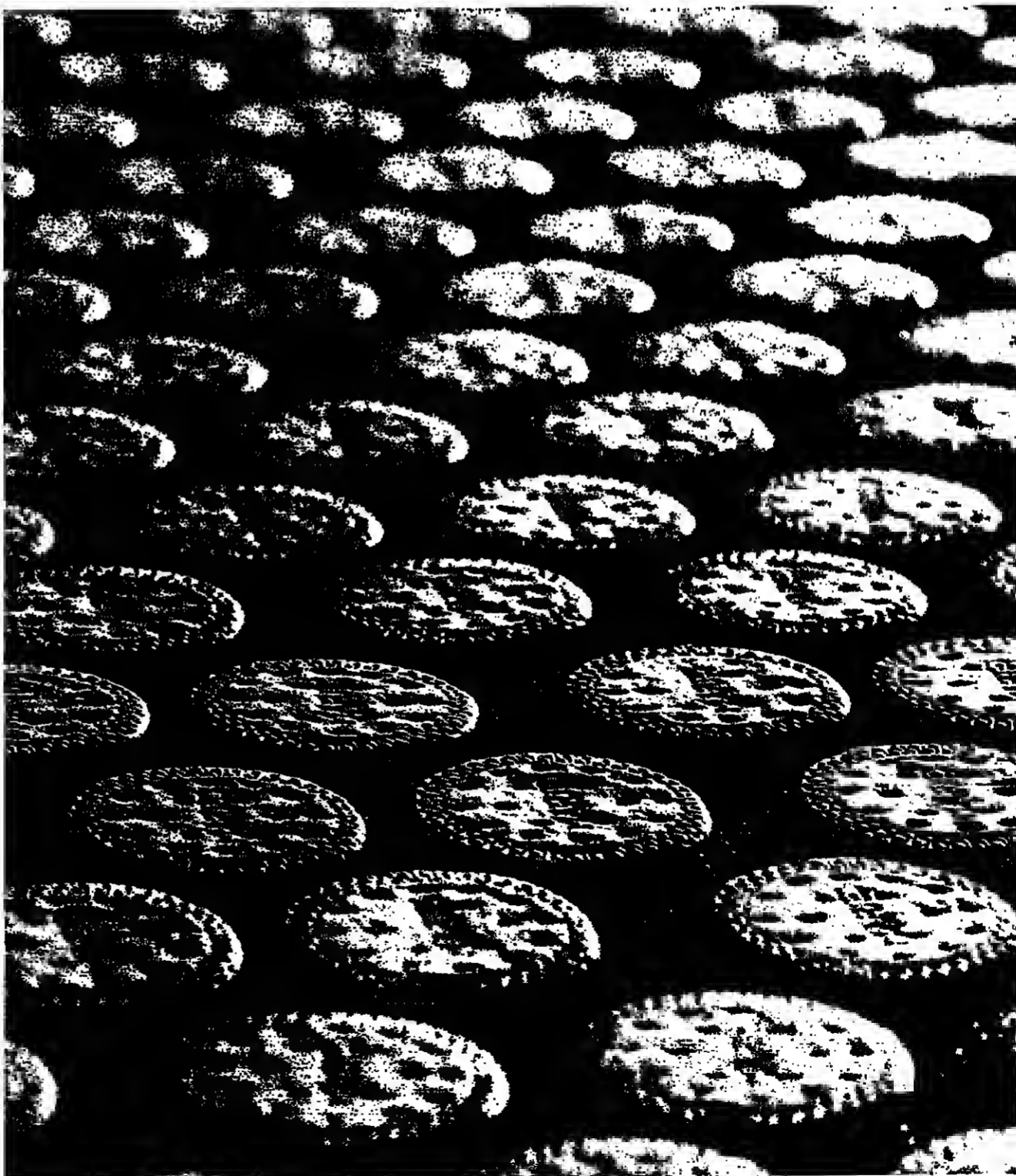
With a background of rapid growth, annual turnover of well over £2 billion and over 40,000 employees, nobody knows better than the United Biscuits Group that efficient communications are vital to business success.

Which is why they have turned to Siemens to provide them with a system that meets their current needs - and which will expand with them into the future.

Now 18 MCX telephone systems supplied through our subsidiary, Norton Telecommunications, form an integrated network that offers United Biscuits staff the very latest in telephone technology.

All to ensure that, with Siemens help, the United Biscuits Group will be ideally placed to stay ahead in a competitive business for many years to come.

For further information, please telephone 0932 785691.



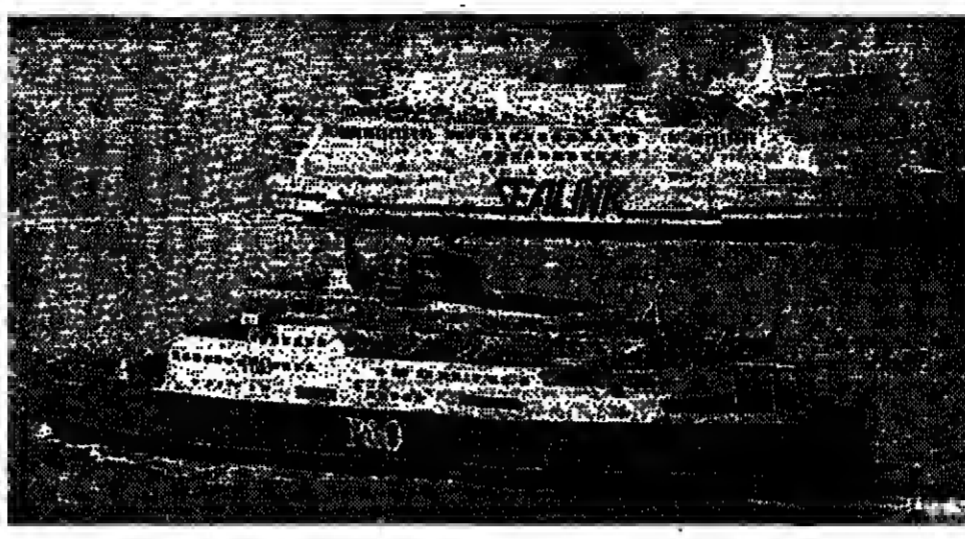
Innovation · Technology · Quality : Siemens

UK NEWS

Sealink plans big investment programme

By Kevin Brown, Transport Correspondent

MR JAMES Sherwood, the American head of the Sealink ferry company, is planning a large spending programme to gear up for competition from the Channel Tunnel.



Sealink plans to edge ahead of main competitor P&O in the race for Channel traffic

Sealink has been bought by a dramatic improvement in the performance of both Sealink and Sea Containers, the Bermuda-based parent company.

Mr Sherwood was in "an expansive mood at the moment" said an aide. "The strategy is to go out and put the company into a position where it can compete in the changing market."

vehicle ferries and two train ferries - at a possible cost of up to £300m.

Sealink is also seeking to acquire control or a significant minority stake in both the French and Dutch companies which operate Channel and North Sea services under the Sealink brand name.

In the UK, Sealink has its eyes on Caledonian MacBrayne, the Scottish ferry company which is part of the state-owned Scottish Transport Group.

STG's bus interests, but has not yet clarified the long term future of CalMac.

Mr Sherwood believes the greatest threat posed by the Channel Tunnel is to the air-lanes, which he thinks will lose large numbers of passengers to the high speed train services between London and Paris.

"We believe there is still a very bright future for ferry traffic on the Channel, particularly from private cars, caravans and lorries - what we call the rubber tyre traffic," an aide said. "We are preparing to take

on the tunnel, not only in terms of its quality of service but in terms of prices. We are convinced that there is still a very large market for the ferries and it is our intention to compete strongly."

Sealink claims to have increased its market share by 10 percentage points last year, and says it controls 50 per cent of car traffic and 64 per cent of roll-on roll-off traffic on the key Dover to Calais route.

Channel and North Sea ferry routes is certain to increase after the effective end of a labour dispute which last year handicapped P&O European ferries, Sealink's main competitor.

In addition, the National Union of Seamen claims to be proceeding with plans to operate two ships on the Dover-Calais route. This may not happen, but a price war on short sea routes is likely as leading competitors fight for market share.

Mr Sherwood has not pursued plans to try to introduce manning arrangements on Sealink ships along the same lines as those which sparked the R & Q dispute. However, union officials say they expect him to raise the issue again at some point.

There has also been union unrest about the transfer of some Sealink ships to flags of convenience, which offer cheaper running costs, and this could also prove a source of problems, especially if Mr Sherwood attempted to re-register ships crewed by militant Harwich-based seamen. The Sea Containers group remains the object of some suspicion in the City, partly because of the rather mercurial nature of Mr Sherwood. "The trouble with Sealink is that it's a one-man band, and he keeps changing his mind," said one analyst.

Ofgas to oversee industrial gas prices

By Max Wilkinson, Resources Editor

BRITISH GAS has agreed to a change in its licence which will give Ofgas, the government-appointed regulatory body, power to oversee pricing policy in industrial markets.

The change is likely to be approved by Lord Young, the Trade and Industry Secretary and by Cecil Parkinson, the Energy Secretary early next week. It will allow British Gas to set whatever industrial prices it sees fit, but force the company to publish a tariff schedule and offer the same price to all consumers in similar circumstances.

When British Gas was privatised, two years ago, it was given a licence under the Gas Act, which subjected its prices for the domestic market to control under a formula supervised by the Office of Gas Supply (Ofgas). However, the director of Ofgas was excluded from supervision of the industrial market.

After the easing of gas prices in late 1986 and 1987, several industrial consumers complained that British Gas had lowered its prices to some customers with alternative fuel supplies, but not to those which were captive gas consumers.

The issue was referred to the Monopolies Commission, which reported British Gas had been using its monopoly power to discriminate in the industrial market. It said the company must publish a price schedule supervised by Ofgas and that it should not be allowed to buy more than 90 per cent of the output of any new North Sea gas field.

The change of licence, which has now been agreed with Ofgas, deals only with the pricing issue. It will make clear that the Director of Ofgas will have power to ensure that the price structure is truly non-discriminatory, but will have no influence over the actual level of prices offered.

British Gas expects the schedule will result in price rises to some customers which have negotiated special deals. But it is thought that the arrangement will put general downward pressure on industrial gas prices.

Unions at odds over job reallocations in Europe

By Charles Leadbeater, Labour Editor

FORD'S decision to transfer production of its Sierra model from Dagenham in east London, to Genk in Belgium came after British unions rejected a proposed understanding with continental unions to oppose jointly any large reallocation of jobs within Europe.

In November, leaders of the West German union IG Metall suggested that the unions should approach Ford of Europe for talks over investment plans on the basis of an inter-union code to oppose large transfers of work.

German union officials said the British unions, the general technical union, and the TGWU, general workers' union, rejected the agreement because they had a good working relationship with Ford of Europe and did not need a European-wide agreement.

Ford's UK unions hope to convene a recent meeting with their continental counterparts to discuss the Sierra decision, and the company's move to introduce three-shift working at Genk. Union leaders fear that Ford and General Motors will press for revised shift patterns to allow more intensive use of machinery.

However, a recent IG Metall bulletin suggested that intense inter-union rivalry will hinder a joint European approach. It is understood that IG Metall has approached the company for talks over its planned £700m investment in the Bridgend engine plant in South Wales.

IG Metall leaders fear that unless some of the investment is diverted to Cologne, the company will stop producing engines there.

Scottish poll tax levels set to exceed expenditure guidelines

By James Buxton, Scottish Correspondent

THE VAST majority of Scottish local authorities are setting levels of the community charge, or poll tax, far in excess of what the Government said they should charge if they were to keep spending under control.

Although many of the councils that are substantially exceeding the guidelines are Labour-controlled, Scotland's three Conservative-controlled district councils are also set to overstep.

Mr Malcolm Rifkind, the Scottish Secretary, tried in November to pre-empt the local authorities by declaring what rate of poll tax each district ought to charge, assuming that they did not increase their spending in real terms. To help them keep the poll tax down,

the Government made an unusually large 9.8 per cent increase in their revenue support grant.

It calculated that the average poll tax for Scotland would be £297, with Edinburgh charging the highest rate of £313, and Orkney the lowest at £94. Glasgow would need to charge £285, the Government said.

Many of the councils complained that the Government's figures were inaccurate and others decided to increase spending regardless. Nearly three quarters of the councils which have already set their poll tax rates have exceeded the Government's figures by more than 20 per cent, some by more than 50 per cent.

Except for the island councils, which are unitary authorities,

the poll tax is arrived at by combining the charge set by the regional council with the smaller charge set by the district.

Only in Strathclyde region has the poll tax come out within a few percentage points, and in some cases below, the Government's figures. Glasgow is to charge £306, only 4.4 per cent above the Government figure. The Strathclyde figures are low because the Government used its so-called "safety net" power to give the region an extra increase in revenue support grant.

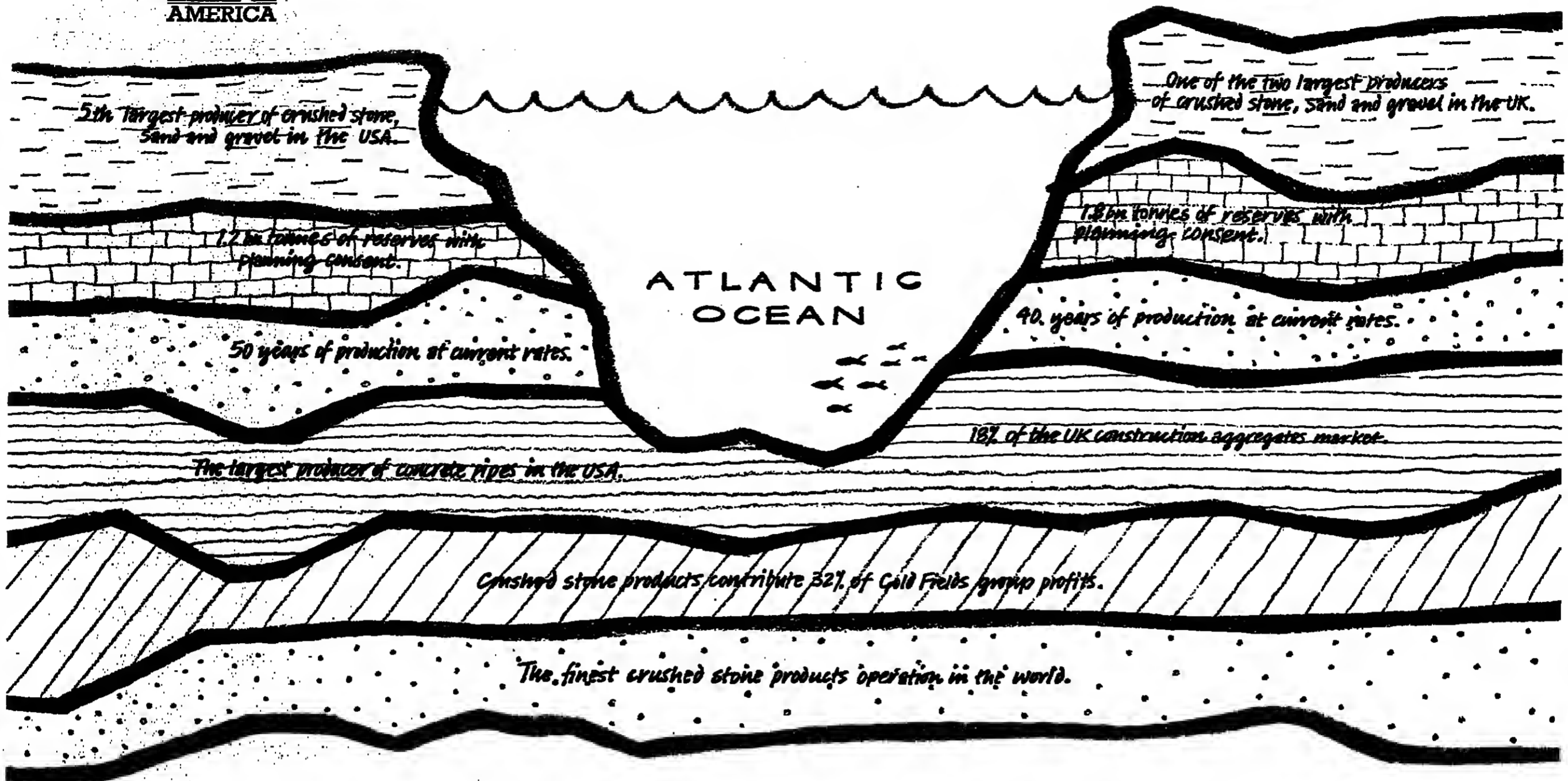
Mr Eric Milligan, president of the Convention of Scottish Local Authorities, said the figures showed how "ill-informed and intrusive" Mr Rifkind was in his estimates.

Advertisement for Mid Glamorgan featuring icons for financial incentives, inter-city service, workforce, air link, M4 access, housing, and natural beauty. Includes a coupon for more information.

Large advertisement for the Factmaster time management system. Features a headline 'TIME IS YOUR MOST PRECIOUS RESOURCE', a list of symptoms of poor time management, and detailed descriptions of the system's components like the binder, database, and starter pack.

ARC
AMERICA

ARC



THE CRUSHING STATISTICS.

Success in the world of natural resources requires a combination of management expertise, co-operation with national and local governments and the courage to invest huge amounts of money over long periods. At Gold Fields, it seems that we have these qualities - as well as the ability to find the natural resources - in abundance.



Consolidated Gold Fields PLC
A GREAT BRITISH BUSINESS, RESPECTED WORLDWIDE.

Our statistics described herein are compiled and presented through independent and accredited companies including audit practices to which they are party. The reserves, production figures and profits show the beneficial interest of Consolidated Gold Fields PLC and refer to the year ended 30 June 1988. The statistics of this advertisement, for which the Directors of Consolidated Gold Fields PLC are solely responsible, have been approved for the purposes of section 37 of the Financial Services Act 1986 by Ernst & Young, a firm authorized by The Institute of Chartered Accountants in England and Wales to carry on investment business. The rules of the Securities and Investment Board require a statement that past performance is not necessarily a guide to the future.

UK NEWS

Companies 'less prepared for tenders than councils'

By Richard Evans

CHANGES soon to take place in local authority tendering for services following the Government's recent legislation on compulsory competition could find private sector companies poorly prepared.

That is the most significant conclusion from independent research into private sector competition conducted for the Labour-dominated Association of London Authorities and its 14 member councils.

The research was done in two parts by a leading international firm of management consultants and by the London Research Centre, formerly the library service of the Greater London Council. They found a sharp contrast between the high level of preparation in the boroughs to cope with the advent of compulsory competition, and the lack of strategic planning shown by many private companies.

Compulsory competitive tendering (CCT) was the main element in the Local Government Act passed in the last session of Parliament.

It covers the services of refuse collection, street cleaning, catering, cleaning of buildings, and ground and vehicle maintenance. It will come into operation in stages from August 1 this year.

It will mean a potentially very large new market for private sector companies, but the ALA research shows that many councils have improved efficiency so markedly that in many cases they should be able to repulse private competition and continue to use direct labour.

Every industry association and big company interviewed by the management consultants considered the way compulsory competitive tendering was being implemented to be misguided. The reservations of the industry stem from a lack of capacity to cope with the rapid expansion, plus an impression that some local authorities would impose contract conditions that would make it unlikely that the private sector would bid for work.

"It is feared that there will be a backlash against CCT as the private sector is seen as unable to fulfil its role. The private sector wishes to absorb the local authority services but can only do so slowly," the report states.

Equally, contractors recognise that in many cases they lack the experience and trained staff to undertake some of the tasks required, like specialised catering or ground maintenance.

The research also shows the low entry levels required for services like street cleaning and ground maintenance, which could mean the emergence of new competition with minimal experience, no financial track record and possible loss-leader tactics.

For the bigger companies the interest in tendering for local authority contracts could be based on the acquisition of valuable assets like depots. That is particularly relevant in London because of high land values, and it would also enable a company to expand into neighbouring areas.

Mrs Margaret Hodge, ALA chairman, commenting on the research, said it refuted the widely held belief that private companies were inherently more efficient than public authorities.

"This research exposes a number of myths about competitive tendering," she said. "It shows that private companies are by no means as well equipped or as well prepared as local councils to provide good quality services while keeping costs to a reasonable level."

A contractors' database has been compiled by the ALA from work done by the London Research Centre.

Councils take stock after rebuff to Torbay

Richard Evans examines obstacles to early attempts to sell off local authority housing

TORBAY Borough Council is about to decide whether it should make another attempt to transfer all its housing stock to two privately-run housing associations, following an embarrassing rebuff from Mr Nicholas Ridley, Environment Secretary.

Council officials are still smarting from the publicity the council received from its first ballot of council tenants, even though it followed all legal requirements to the letter. They believe it should be the Parliamentary draftsmen in the stocks rather than them.

The trouble started when Torbay, like a lengthening list of other local authorities, decided last year to try to transfer its entire stock of 1,200 houses, valued at around £56m, to the two housing associations.

The subsequent ballot of tenants showed only 887, or 15 per cent, in favour of the transfer, while 2,210 or 42.5 per cent were against. It seemed a clear thumbs down.

Under the terms of the 1985 Housing Act - under which the Torbay council conducted the ballot - failure to register a vote can be interpreted as a vote in favour.

All the Act specifies is that "The Secretary of State shall not give his consent if it appears to him that a majority

of tenants of the dwelling houses to which the application relates do not wish the sale to proceed."

So Torbay decided that the votes of the 2,209 tenants who abstained could legitimately be placed in the Yes camp, giving approval to the transfer.

The Environment Department admits that this is technically correct, but Mr Ridley has been deeply embarrassed by the episode.

He wrote to the council earlier this month refusing to give the go-ahead and advising that it conduct a second ballot under more acceptable rules.

The Conservative-controlled council was told that a postal ballot of tenants might produce a higher vote than the original polling station ballot in November.

This recommendation is supported by the Electoral Reform Society, which conducted the original ballot.

A decision on whether to go ahead with a second ballot is due to be taken by the council tomorrow night, following consultations with the housing associations and with Environment Department officials.

Despite the embarrassment Torbay has caused, all the indications are that the sale of local authority assets will continue at a steady if unimpressive pace.

Furthermore the divestment

HOUSING TRANSFER GUIDELINES

- Sale must be to genuinely independent body.
- Sale must be at tenanted market value.
- Adequate arrangements to be made to help those in need with rented housing.
- Private monopoly to be avoided by dividing ownership in cities.
- There must be adequate consultation with tenants.

of assets will probably involve Labour and Democrat councils, as well as those controlled by Conservatives.

The record so far is mixed, however, with the vast majority holding back to see what happens and how easily finance can be raised.

The only council to have completed the sale process is Chiltern District Council in Oxfordshire, where the finance has been provided by Paribas, the French bank.

Up to 150 councils have conducted feasibility studies on housing transfers and about a dozen are forging ahead with transfer schemes. They intend

to avoid Torbay's voting obstacle.

Rochford District Council in Essex did run its ballot on the "abstainers vote yes" principle. However 87 per cent of tenants voted and 52 per cent of them were opposed to transfer.

Seventons tenants in Kent have voted heavily in favour of transfer, while tenants in Salisbury rejected a transfer decisively. Other local authorities planning to hold ballots are Gloucester, and Arun, in West Sussex.

Most of the councils are Conservative controlled, but a handful of Labour authorities, including Swansea, are considering the idea on the grounds that transfer to a privately run housing association offers the best prospect for continued low rents.

There is an admitted element of self-interest at work as well.

Housing stock is becoming more difficult to administer because of the number of houses being bought by tenants.

Local authorities fear the situation will get worse once whole estates are transferred to private landlords under the terms of the 1985 "tenants' choice" Housing Act.

It is partly a matter of pulling out of a declining industry, and two to three dozen coun-

cils could make the move in the next year.

In a typical transfer, the local authority reaches agreement with an existing housing association or helps to set up a new one.

Rents from the transferred tenants go to repay the loan raised by the association to buy the houses, and towards maintenance and administration.

Some authorities are looking what because of possible financial difficulties, but so far the indications are that the finance is available if required.

Among the options are fixed interest loans, deferred interest loans, straightforward "help to buy" or a cross-subsidy of financing instruments.

The full provisions of the 1985 Act will allow tenants on individual housing estates to vote in favour of transfer to a private sector landlord or housing association, but the attitude of the local authority.

These provisions are only now coming fully into force.

The current trickle of transfers is council-led, and is taking place under the 1985 Act based by guidelines set out by the Environment Department last June. From now on, the two systems will run in parallel, with transfers sponsored either by the local council or by tenants.

Costs of green belt estimated at £14.6bn

By John Hunt, Environment Correspondent

THE green belt round London has imposed a total cost of about £14.6bn on Britain, according to a report researched by Business Strategies for ARC Properties.

The figure is based on the additional cost of building sites caused by the land shortage resulting from protection of the green belt. It takes into account house price inflation, higher wage costs in the south-east, labour shortages, higher industrial and commercial rents and the way those feed into the economic system.

The report claims that if all 16 of Britain's green belts are taken into account, the total cost to the nation could account for well over 10 per cent of gross national product.

Mr Tony Burton, planning officer for the Council for the Protection of Rural England, said he was amazed by the report. He maintained that overheating in the south-east economy and excessive lending by mortgage institutions bore most blame for high house prices.

"Abolish the green belt tomorrow and you would do nothing to help those in real

housing need," he said.

ARC, the property development arm of the ARC Group, recently applied for planning permission to build a very large shopping centre in green belt land at Wraysbury, Berks, but the plan was rejected on appeal. However, a spokesman for the company said the present report was commissioned before the result of that appeal had become known.

The document estimates that house prices in London and the south-east are £3,617 higher on average because of the prohibition on building in the green belt. This is equivalent to an extra £9-a-week for those paying an average mortgage in the area.

It estimates that current policies drive up operating costs for industry and commerce with savings of 4 per cent higher because of high housing costs.

The report says about 40 per cent of the total London green belt of 1.2m acres consists of land damaged by some form of dereliction.

Report from ARC Properties, 20 Manser Street, Bath BA1 1LX. Price £25.00.

Labour warns against US-style health care

By Rachel Johnson

US-STYLE health care would be a disaster for Britain, the Labour Party claims in a consultative document published today.

"Americans are astonished that suggestions are being made in this country to introduce competition and the market into health care," the report says.

The report, written by Ms Harriet Harman, one of Labour's health team, says government plans to change the UK health system "are not new ideas. They have already been tried in the US - and failed."

The report is intended to influence public opinion in advance of the publication next week of a white paper on the National Health Service.

It says Americans believe their health care system has failed and that it would be foolish of the British Government to adopt a competitive system similar to that in the US.

The US spends more than any other country on health care - 10.7 per cent of gross

domestic product, compared with 5.9 per cent in the UK - but this largely reflects unnecessary treatment and a bloated bureaucracy, the report says.

Administrative costs would increase if the UK introduced competition. US health care "is weighed down by a huge bureaucracy of delivering bills and reclaiming them from insurance companies."

The NHS is streamlined in comparison because it is a "planned, centrally financed service."

The report says it is "deeply ironic" that suggestions have been made to introduce competition into the NHS, and that hospitals should be allowed to opt out of local authority control at a time when many Americans are looking to the British system for ideas.

The most fundamental criticism in the report is that the poor lack sufficient treatment in US year-round hospitals, while the rich suffer from over-treatment because commercial factors influence clinical decisions.

MPs to seek review of Ministry of Agriculture

By Michael Cassell, Political Correspondent

THE GOVERNMENT will this week face further pressure in Parliament to review the responsibilities and structure of the Ministry of Agriculture, Fisheries and Food, following the controversy over its handling of recent outbreaks of food poisoning.

MPs on both sides of the Commons have expressed increasing concern over what they see as the conflicting roles of the ministry, which is responsible for farmers and food production. It also has to police the food industry to safeguard the consumer.

Sir Richard Body, a former chairman of the Commons select committee on agriculture, has already asked Mrs Thatcher to scrap the ministry, and Mr Robert McCrindle, Con-

servative MP for Brentwood and Essex, is expected today to table a Commons motion asking the Prime Minister to establish a ministry of consumer affairs.

He said yesterday that he said there was a "powerful case" for a new ministry - the recent controversy over food hygiene had proved the need for a ministry to look after the interests of the consumer, while leaving the present ministry to represent producers.

Mr McCrindle added: "The Government has sometimes been criticised for being more concerned with the interests of big business than the consumer. The creation of a government department devoted to the consumer would help to dispel this idea."

UP TO

10.25%*

SIX COUPONS JUST IN CASE FIVE SMARTER INVESTORS GET THERE BEFORE YOU.

I/We enclose a cheque No. for £..... (minimum investment £1,000) to be invested in an Alliance & Leicester Investment Plus account.

I/We would like the interest to be paid: yearly monthly (on £2,500 or more)

Full name(s)

Address

Postcode.....

ALLIANCE + LEICESTER

To: Alliance & Leicester Building Society, FREEPOST, Oadby Administration, Glen Road, Oadby, Leicester, LE2 4FF (No stamp required.) 07189/0712

I/We enclose a cheque No. for £..... (minimum investment £1,000) to be invested in an Alliance & Leicester Investment Plus account.

I/We would like the interest to be paid: yearly monthly (on £2,500 or more)

Full name(s)

Address

Postcode.....

ALLIANCE + LEICESTER

To: Alliance & Leicester Building Society, FREEPOST, Oadby Administration, Glen Road, Oadby, Leicester, LE2 4FF (No stamp required.) 07189/0712

I/We enclose a cheque No. for £..... (minimum investment £1,000) to be invested in an Alliance & Leicester Investment Plus account.

I/We would like the interest to be paid: yearly monthly (on £2,500 or more)

Full name(s)

Address

Postcode.....

ALLIANCE + LEICESTER

To: Alliance & Leicester Building Society, FREEPOST, Oadby Administration, Glen Road, Oadby, Leicester, LE2 4FF (No stamp required.) 07189/0712

I/We enclose a cheque No. for £..... (minimum investment £1,000) to be invested in an Alliance & Leicester Investment Plus account.

I/We would like the interest to be paid: yearly monthly (on £2,500 or more)

Full name(s)

Address

Postcode.....

ALLIANCE + LEICESTER

To: Alliance & Leicester Building Society, FREEPOST, Oadby Administration, Glen Road, Oadby, Leicester, LE2 4FF (No stamp required.) 07189/0712

I/We enclose a cheque No. for £..... (minimum investment £1,000) to be invested in an Alliance & Leicester Investment Plus account.

I/We would like the interest to be paid: yearly monthly (on £2,500 or more)

Full name(s)

Address

Postcode.....

ALLIANCE + LEICESTER

To: Alliance & Leicester Building Society, FREEPOST, Oadby Administration, Glen Road, Oadby, Leicester, LE2 4FF (No stamp required.) 07189/0712

I/We enclose a cheque No. for £..... (minimum investment £1,000) to be invested in an Alliance & Leicester Investment Plus account.

I/We would like the interest to be paid: yearly monthly (on £2,500 or more)

Full name(s)

Address

Postcode.....

ALLIANCE + LEICESTER

To: Alliance & Leicester Building Society, FREEPOST, Oadby Administration, Glen Road, Oadby, Leicester, LE2 4FF (No stamp required.) 07189/0712

ALLIANCE + LEICESTER

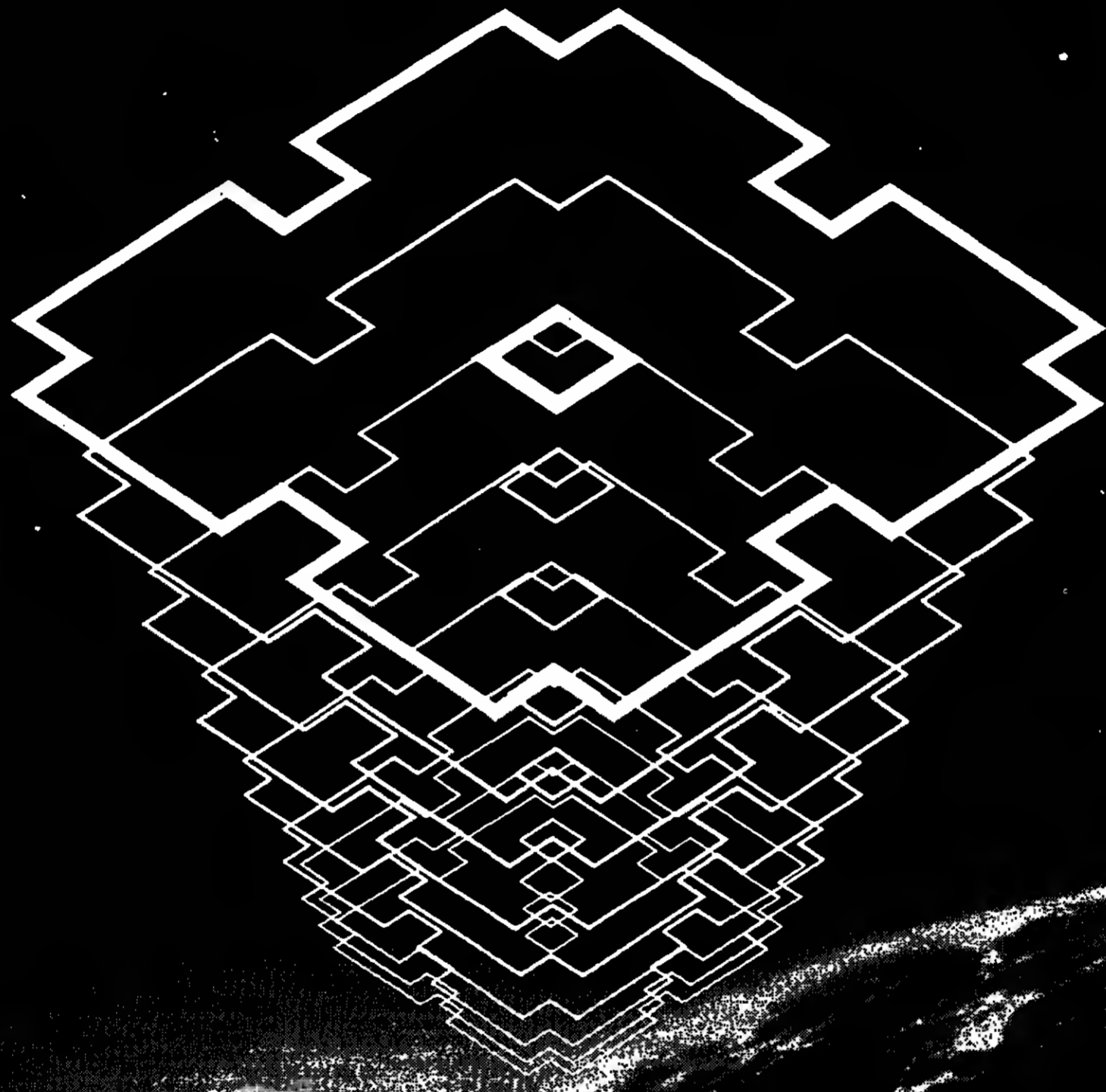
YOU GET A SMARTER INVESTOR AT THE ALLIANCE & LEICESTER.

*INTEREST IS NORMALLY PAID ANNUALLY - CURRENTLY 9.15% ON £1,000-£2,499, 9.45% ON £2,500-£9,999, 9.9% ON £10,000-£24,999 AND 10.25% ON £25,000 OR MORE. MONTHLY INCOME RATES 9.05% ON £2,500-£9,999, 9.50% ON £10,000-£24,999 AND 9.85% ON £25,000 OR MORE. INTEREST RATES QUOTED ARE NET OF BASIC RATE TAX AND MAY VARY. WITHDRAWALS ARE SUBJECT TO FOUR MONTHS' NOTICE OR THERE IS IMMEDIATE ACCESS WITH 90 DAYS LOSS OF INTEREST, SUBJECT TO BRANCH LIMITS.

ALLIANCE & LEICESTER BUILDING SOCIETY, OADBY ADMINISTRATION, GLEN ROAD, OADBY, LEICESTER, LE2 4FF

ALLIANCE & LEICESTER BUILDING SOCIETY

SUMITOMO BANK will be listed on the London Stock Exchange on Jan. 24



Where the emphasis is on initiative

Sumitomo's response is always decisive.
 As a major world bank, we stay atop local and international developments through a sophisticated global network. Rapid access to the complete picture combines with proven international banking expertise to assure more opportune planning and response.
 Resourceful innovations in Sumitomo's service further facilitate the carrying of plans through to successful completion.
 Sumitomo's capabilities make things happen.



SUMITOMO BANK

LONDON BRANCH: Temple Court, 11, Queen Victoria Street, London EC4N 4TA, U.K. Tel.(01)236-7400
 Birmingham Representative Office: Bank House, Cherry Street, Birmingham B2 5AL, U.K. Tel.(021)632-5614



HERMES
PARIS

SALE

21st-28th JANUARY 1989

3 ROYAL EXCHANGE, LONDON EC3
TEL. 01-402 7794 (OPEN MON-FRI)

255 NEW BOND STREET, LONDON W1
TEL. 01-409 8866 (OPEN MON-SAT)

GRANVILLE

SPONSORED SECURITIES

Company	Price	Change	Yield	P/E
10158 Am. Intl. Inv. Fund	302	+2	10.3	3.4
775 Ambridge and Shales	300	0	10.8	3.3
2484 BBS Design Group (US\$)	30	0	2.1	6.8
104928 Barmby Group (US\$)	23	-4	2.7	1.8
18074 Barmby Group Cr. Pref. (US\$)	107	-1	4.7	4.3
7016 Bray Technology	114	-3	1.2	4.5
10877 Broomhill Corp. Pref.	107	-3	11.0	18.3
2100 CCL Group (US\$)	296	0	12.3	4.3
16740 Carbu Plc (US\$)	145	-1	14.7	4.8
770 Carbu 7.5% Pref (US\$)	110	+1	10.3	9.4
6456 George Hill	205	-5	12.0	3.4
9480 Isis Group	115	-1	12.0	3.4
12110 Jackson Group (US\$)	115	0	5.3	29.7
22301 Malt House H.V. (US\$)	286	+1	7.5	7.2
12641 Robert Jenkins	104	0	8.0	2.0
18225 Scripps	405	0	7.5	7.2
8345 Tandy & Carlisle	270	-5	7.7	2.9
10877 Tandy & Carlisle Corp. Pref.	184	+4	10.7	18.3
4002 Trenton Holdings (US\$)	93	0	2.7	2.9
10877 Trenton Holdings (US\$) Pref.	106	0	8.4	7.5
5940 Veterinary Group Plc Ltd	360	+5	22.0	6.1
8064 W.S. Yates	360	+4	16.2	4.3

Granville & Co. Limited, 8 Leam Lane, London EC3M 8EP, Telephone 01-424 1212

Power boards oppose rule for privatised grid supply

By Max Wilkinson, Resources Editor

THE 12 area electricity boards, which are to be privatised in 18 months, are trying to find ways round regulations which appear to stop competition between suppliers.

Draft rules for the privatised industry, published earlier this month, say that all but the smallest power stations must submit to "despatch" by the central controllers of the national transmission grid. That means the central centre can turn plant on and off to prevent blackouts and to ensure that only the plant with lowest fuel costs is kept running as demand slackens.

The 20 or more potential independent power suppliers now negotiating with area boards want long-term agreements which will allow them to keep running at full capacity. That is because most such projects would be financed 80 per cent by bank loans. The bankers would need assurances that the plant could guarantee to sell its output for the 10- to 15-year life of the loan.

The Government's draft licences for the industry, which included the rules for despatch, were regarded with dismay by most independent producers, because they appeared to remove control over the output of the plant from the owners and give it to the grid. That would apply to all plant of more than 100MW output.

Several area boards which forecast an increasing demand for power have suggested that some contracts might be effectively exempted from central despatch. However, the National Grid Company (now established in shadow form) opposes this.

The Central Electricity Generating Board, whose power stations are to be divided between two competing companies, has expressed strong anxiety about the move. It fears that in a new competitive power market the area boards might unfairly favour power stations which they owned or had under contract from an independent power producer.

In the new system, area boards will buy most of their electricity under contract from power stations owned by generating companies. These contracts will include a fixed charge to cover capital costs, and a running charge to be paid whenever the plant is producing electricity.

It is envisaged that the 12 area boards will put all these contracts into a common pool so that only the plant with lowest running costs would be called on at any given time.

One idea is to make this pool voluntary so that certain independently owned power plant could be excluded and always kept running. Unfortunately, this would be risky for the area board which had signed the contract with the producer, because the board would be obliged to pay for power from this plant, even if its fuel costs became much higher than those of competing plant.

A second possibility under discussion would be to load a high proportion of the cost onto the fixed charge, which will be passed on to electricity consumers. However, the Government has yet to decide how much of an area board's costs may be passed on to the customers if they exceed average costs for the system.

A board signing up an independent power producer would therefore have to take a calculated risk that the costs of that particular plant would not rise much above average for at least a decade.

It is also possible to persuade the independent power producer to vary his fuel charges so that the plant was always despatched - that is, switched on in competition with other plant. The independent producer would then take the risk that the payment he received for fuel might not cover his actual costs in periods of actual demand for electricity.

Intense discussions are now taking place to find a way of sharing the risk between the independent producers, area boards and consumers.

The Government has so far taken a fairly robust line against passing the risk to consumers.

UK NEWS

Inequalities in income widening, study shows

By Ralph Atkins, Economics Staff

INEQUALITIES in income between rich and poor households have widened in the past decade even after taking account of taxes and benefits, according to official estimates.

The proportion of income going to the poorest 20 per cent of households fell between 1975 and 1984 but the share going to the top 20 per cent rose, figures from the Central Statistical Office show.

This widening of the income gap is particularly pronounced in the original incomes of households, before taxes and benefits. However, the gap has also widened in estimates of final incomes. These estimates allow for the effect of taxes and state support, including benefits in kind such as state education and school meals.

The results come from a study of the redistributive effect of government spending. The study shows that state intervention does reduce inequality but the mid-1970s has not kept pace with growing inequality between original incomes.

The original income of a household includes earnings from employment, occupational pensions and investments.

In 1975, original incomes of the poorest fifth of households accounted for 0.8 per cent of total incomes. By 1984 this had fallen to 0.3 per cent. Final incomes of the poorest fifth accounted for 7.1 per cent of the total in 1975, falling to 6.3 per cent in 1984.

At the other extreme the richest fifth of households took 44 per cent of original incomes in 1975 rising to 51 per cent in 1984. The share of final incomes rose from 38 per cent to 43 per cent over the same period.

At the other extreme average original income of the poorest 20 per cent of households was £130 a year. The average original income of the top 20 per cent was £24,790.

Average final incomes, after taxes and benefits, for the two groups were £4,190 a year and £17,260 a year respectively.

CSO Economic Trends No 42, HMSO, £9.25.

Salford University may join schools and industry compact

By David Thomas, Education Correspondent

SALFORD UNIVERSITY is planning to join a local compact between schools and industry in a move which could increase the numbers of pupils from deprived inner-city schools going to university.

The compact is an agreement between businesses and schools in urban areas under which employers give priority in recruitment to pupils who reach agreed standards of achievement and commitment.

The university is so convinced of the potential of the compact that it is helping to fund 30 new ones. The first UK compact began in east London in 1987.

Salford, in one of the first moves by a university to become formally involved in a compact, has discussed its role with businesses and schools in Salford, one of the most deprived inner city areas in the north-west.

The university's participation would be aimed at prolonging the time spent in the educational system by pupils from deprived backgrounds. This has emerged as one of the main benefits of the east London compact.

Professor John Ashworth, Salford's vice-chancellor, said that the university's involvement could take three forms:

- It could encourage some of its science undergraduates to teach in local schools. This would ease the severe problems that inner city schools have in attracting teachers for some subjects, such as science. Professor Ashworth said that the undergraduates would spend about half a day a week for a year on this programme, which would be equivalent to the links which other Salford undergraduates develop with commercial companies.
- The university would guarantee to take on undergraduate degree courses a percentage - perhaps a quarter - of students studying in local colleges of education for vocational qualifications, such as a Higher National Diploma (HND). This guarantee, equivalent to the jobs' guarantee offered by employers in the compact, would boost the status of education for vocational qualifications.
- The university would encourage local schools to use its facilities such as laboratories.

Professor Ashworth said that Salford was already engaged in some of these activities but the compact would give its participation greater coherence and allow it to be expanded.

Council plans Crimean resort

By Paul Cheswright, Property Correspondent

GLASGOW has spread to Matlock, where the Labour-controlled Derbyshire County Council has raised local eyebrows with plans to become a property developer on the Crimean coast of the Black Sea in the Soviet Union.

The idea, evidently hatched two years ago on a beach walk by Mr David Bookbinder, the council leader, is for a tourist resort - hotels, apartments, villas, and a golf course - near Yalta.

The council said the project could be worth £500m, but so far no ratepayers money is involved.

Mr Bookbinder has persuaded Mr Owen Oyston, formerly an estate agent, now chief executive of Miss World, to take the initial risk.

The two became friends when Derbyshire Pension Fund put money into the ill-fated News on Sunday newspaper, which Mr Oyston temporarily rescued, and then switched its funds into one of Mr Oyston's companies.

So far, the risk is not very great. There is an agreement with the Yalta City Council and an approval for the scheme from both the Ukraine and Soviet Union governments. A joint venture company has been set up - 51 per cent for the Crimean Regional Council and 49 per cent for the Derbyshire County Council and Mr Oyston - to lease the land.

However, money has been spent on a design by architects Richard Rogers and on the travel involved in the official negotiations. Finance will be more complicated, and will be charged to Derbyshire ratepayers when a feasibility study is carried out.

"It will be time for the hulloons," said Mr Bookbinder.

Mr Bookbinder and Mr Oyston hope that by then hoteliers and banks will be rushing to invest in this elaborate celebration of local authority collaboration, East-West commercial enterprise and the twinning agreement between Derbyshire County Council and the Crimean Regional Council.

Inflation rise may go on despite curbs says Amex

By Terry Byland

WARNINGS against over-optimism regarding inflation curbs have been raised from the keynote of today's edition of the Amex Bank Review.

"Underlying inflation rate is now about 6 per cent in the UK and 4 per cent - 5 per cent in the US, with a clear acceleration in the second half of 1988," says the Review.

It perceives that the problem may be less severe in the US than in the UK, but adds that "monetary policy is not nearly as tight in the US."

High interest rates are "beginning to bite" in Britain, it adds, but the immediate effect of this economic slowdown may be higher inflation, because "wage demand will be slower to adjust."

In the US, real interest rates are still below the ranges set between 1983 and 1986 and

Amex suggests that consumer spending may not slow until rates have been raised significantly, in company with a major setback in both bond and equity prices.

Against this backdrop, the Amex review fears that rates of around 9 per cent on both UK Gilts and US bonds suggest too much optimism in the financial markets towards the authorities' anti-inflation policies.

"The problem for 1989 may be that in one or both countries, the slowdown (in growth) does not occur." In the UK that would mean higher inflation and worsening trade figures.

In the US, the consequences of continued growth might be less serious but the Federal Reserve would have to tighten its funds rate by a further 200 basis points to effect a squeeze similar to that on this side of the Atlantic.



How to get world financial news with greater currency

It's really quite simple. Just fill out and mail the coupon at the bottom of this ad. It will bring you the most current financial news in the world - the news and information that can put more currency in your pocket.

That's the power of Dow Jones News/Retrieval - the computerized business and financial information service from the publisher of The Wall Street Journal, Dow Jones & Company, Inc.

Using your personal computer and modern News/Retrieval will give you the day's news from the U.S., Canada, Europe, Latin America and Africa just 90 seconds off the Dow Jones News Service wire. Plus news from the Far East via Kyodo News International's Japan Economic Daily.

Current stock quotes from the New York, American and other North American exchanges are delivered with a unique News Alert feature to keep you abreast of breaking news items on the issues you follow.

You'll be able to check a weekly survey of foreign exchange rates and leading economic indicators instantly. Research American firms by accessing company vs. industry comparisons, annual report data, the full text of The Wall Street Journal back to 1984 and more. There are over 40 information services in all.

To get your registration information, just mail the coupon at right. Or fax it to Scott Elin in the U.S. at 1-609-520-4062. For even faster service, telephone us collect at 1-609-520-4065, Ext. 113. It can mean a world of difference in how you profit from the news. Starting today.

DOW JONES NEWS/RETRIEVAL
From Dow Jones & Company, Inc.
The information that powers today's business.

© 1989 Dow Jones & Company, Inc. All rights reserved. This offer expires January 31, 1990.

Packaging suppliers criticised

By Christopher Parkes, Consumer Industries Editor

CONTINENTAL packaging suppliers operating in the UK offer a better deal than their British competitors, according to a National Economic Development Council report.

On price, quality, delivery, value for money and customer service, they score better overall than UK companies and pose a considerable threat to the indigenous industry.

The 28th packaging industry will face tough competition from overseas companies when European Community markets are integrated in 1992. Ms Rowena Mills, chairman of the council's packaging working party, said at the weekend.

Foreign suppliers interviewed for the report by Metra Consumer said their strength stemmed from viewing Europe as a single market, as well as from specialisation, investment in quality, customer care, research and development.

They identified the British industry's main weaknesses as failure to provide delivery

problems, complacency and failure to control costs, even though personnel costs had been reduced.

They also accused British management of being over-concerned with the production process and under-concerned with how we have seen production people put into marketing posts: this disadvantages us as suppliers," said Mr Peter Gorle, a Metra executive.

In the short term, he said, British packaging makers should improve communications with customers at all levels. Representatives should be transformed from order-takers to order-getters, he said.

UK producers should also undertake more long-term planning and investment in new skills, innovation, marketing and learning languages.

There were already signs that packaging users were stealing the initiative in innovation. "We are coming to the situation where the user is calling the tune," Mr Gorle said.

The battle for the packaging machinery market appears already to have been lost, with imports taking a 68 per cent share of the market, according to the report.

Overseas suppliers have a 28 per cent share of the business in packaging and wrapping paper for food use, 17 per cent of the £510m trade in plastic film, almost a quarter of the fast-growing £250m laminates business and account for 8 per cent of dealings in the basic business of folding cardboard cartons, worth a total of £200m a year.

The future of the UK packaging industry will be discussed at a national conference to be held at the Confederation of British Industry's London headquarters on July 18.

UK Packaging - Food for Thought. NEDO Books, Millbank Tower, Millbank, London SW1P 4QX. £50 (£52 for overseas orders).

Japanese say language affects location choice

By Della Bradshaw

THE ENGLISH language and culture are the main reasons given by Japanese companies for their preference for European manufacturing base, according to a report from the management studies group of Kings College, London.

Britain, West Germany and latterly France have become the three preferred locations in Europe for Japanese companies wanting to set up in Europe, the report says. As well as languages, the UK's advantages are a skilled workforce and low wage bills, but it is West Germany that is perceived by the Japanese as having the most productive and committed workforce.

The authors of the report, which was funded by the Economic and Social Research Council, questioned 36 Japanese companies with manufacturing facilities in Europe about their reasons for choosing specific locations. The companies covered a wide range of industries, from rubber to electronics and mechanical production.

Japanese investment in Europe is principally motivated by the need to circumvent EC-imposed restrictions on the import of goods, according to the 36 companies interviewed.

Manchester canal's status under scrutiny

By Ian Hamilton Fazzy, Northern Correspondent

THE PUBLIC inquiry into Manchester Ship Canal status will open on February 7 and looks certain to prolong the four-year controversy about control of the canal.

The company wants the Government to pass a Harbour Revision Order changing its statutory right of Manchester City Council to a boardroom majority of one. That would smooth managerial control, but is being opposed by a large group of mainly London-based institutional shareholders.

They include Globe Investment Trust, Prudential Assurance, the Water Authorities Pension Fund, the Carrol Group and the 1,000-strong Smaller Shareholders' Association.

They are led by Mr Nicholas Berry, chairman of Harrop.

Mr John Whittaker, the Manchester property developer and chairman of Peel Holdings, won control of the company nearly two years ago after a bitter, nine-month takeover battle.

His private company Great-Hey Investments owns half of the ordinary shares and 80 per cent of the less valuable preference stock. There are

Government accused of false claim on secrets bill

By Michael Cassell, Political Correspondent

THE Government's controversial legislation to reform the Official Secrets Act 1911, which this week enters its committee stage in Parliament, yesterday came under renewed attack from the Campaign for Freedom of Information.

The Official Secrets Bill, which proposes to replace the "catch-all" nature of existing legislation with six specific categories of protected, official information, has already attracted a large number of amendments, including several from Tory MPs.

The aspect of the bill criticised most widely is the Government's decision not to include a defence under which disclosure could be justified on the grounds that it is in the public interest.

Ministers claim the concept cannot be incorporated in the criminal law but several amendments which would provide a public interest defence have been tabled for debate.

The Campaign for Freedom of Information claimed yesterday that the Government's rejection of a public interest defence was based on arguments "which could not withstand scrutiny."

Mr Maurice Frankel, director of the campaign, accused the Government of making false claims in suggesting there was no respectable precedent in British criminal law for a public interest defence.

"The Government is saying that, no matter how grave the problem, the only permissible solution even for a journalist is to report the matter to the proper authorities and to keep quiet. Even if they fail to act, and the choice is between exposing the abuse or remaining silent, the Government is telling us our duty to society is to remain silent."

COMMUNAUTE URBAINE DE MONTREAL
(MONTREAL URBAN COMMUNITY)

US\$50,000,000
FLOATING RATE NOTES DUE 1989

Bondholders are hereby informed that the rate applicable to the 10th period of interest has been fixed at 8.875% per annum.

The coupon No 10 will be payable on 20 July '89 at the price of US\$487.07 representing 181 days of interest covering the period as from 20 January '89 to 19 July '89 inclusive.

DBSBANK
The Reference Agent

23 January 1989

IG INDEX LTD, 9-11 GROSVENOR GARDENS, LONDON SW1W 0BD
Tel: 01-828 7233/5699 Reuters Code: IGIN, IGI0

FT 30 Jan. 1565/1574 +3 Mar. 1581/1590 +3
FTSE 100 Jan. 1919/1929 +1 Mar. 1939/1949 +1
WALL STREET Jan. 2240/2246 +5 Mar. 2249/2261 +4

Prices taken at 5pm and change is from previous close at 9pm

MANAGEMENT

European electronics

Nokia: metamorphosis is only the beginning

Della Bradshaw and Olli Virtanen assess the challenges still to be confronted by the Finnish group following its diversification and the death of its former chairman

The death last month of Karl Kairamo, chairman and chief executive of Nokia, one of Finland's largest companies, together with indications that the group's performance in 1988 will not match original expectations, raises questions about its underlying strategy. This has been to diversify rapidly away from its original base in rubber products and paper and into electronics.

Kairamo's successor, Simo Vuorilehto, insists that the restructuring is sound and is already beginning to show positive results. He points out that, as president and chief operating officer of Nokia, he was Kairamo's right-hand man in planning and implementing the restructuring of the company.

"Ten years ago we were quite a traditional company - I don't like to use the expression 'old-fashioned'. Now we are becoming a modern company," he says. It is inevitable that the strategy will now be implemented differently. Kairamo and Vuorilehto were worlds apart in their style of management. In contrast to Vuorilehto's more hands-on approach, Kairamo was the great communicator who gave a big boost to the company's self-confidence in world markets. He was an outspoken and unrelenting executive.

In addition Kairamo took part in various pan-European working groups and he was not shy to voice his opinions of Finland's foreign policy. He enjoyed great respect in Finland; his corporate vision was practically never questioned publicly until his death. During recent weeks, though, some serious questions have been raised about Kairamo's legacy. The Finnish company is taking an enormous gamble. It is betting it can enhance its reputation as one of Europe's leading electronics companies through a two-pronged programme of acquisitions (now largely complete) and buying

in international management to run the new divisions. A decade ago the profits of Nokia, Finland's largest industrial company, came from paper, cable and rubber products. (It is still the world's leading supplier of cable-making machinery, for example.) Its presence in the electronics industry was minimal. But the jolt of the oil crisis in the 1970s persuaded then-president Bjorn Westerlund that heavy industry no longer provided a sufficiently high growth potential, and so the company would have to back a

Joint ventures, collaborative deals or acquisitions could all be announced in the next year. In addition, the company is divesting itself of many of its small traditional Finnish divisions

different horse if it were to expand and become more profitable. Because Nokia was already producing telecommunications cables in its cable division it decided to expand into communications. It acquired the Mohira mobile radio business in the late 1970s in order to consolidate that area. Success there led Nokia into the office computer and retail electronic point-of-sale market in the late 1970s and early 1980s. In 1980 Nokia set up its own microchip company, Micromas, to support the product areas.

In 1984 the company made its first move into the consumer electronics business when it bought into the Swedish Luxor and Finnish Salora colour television companies. (It has since bought the French Oceanic television manufacturer.) It calculated that its expertise in selling into the consumer marketplace through its traditional divisions - rubber shoes and tissue paper, for example - could be carried over to consumer electronics.

But it has been a handful of major acquisitions over the past two and a half years that has completed the metamorphosis of the wood and rubber boot company into an electronics one. Two-thirds of the company's sales of Fm22bn (£2.9bn) this year will be in electronics, compared with only 10 per cent in 1980. The two most significant acquisitions have been of the television division of the West German company Standard Elektrik Lorenz (SEL), a subsidiary of Alcatel (and formerly part of IIT), and the microcom-

puter division of Ericsson Information Systems (EIS), part of the Swedish Ericsson telecommunications group. Nokia bought the SEL division in December 1987 and the EIS one in January 1988. The acquisitions mean that Nokia Consumer Electronics is now the third largest television manufacturer in Europe, behind Philips and Thomson, and Nokia Data Systems is Europe's seventh largest information technology manufacturer. Nokia now has television manufacturing sites in six European countries, and established marketing outlets for its computer products in Germany, the UK and France as well as Scandinavia.

Nokia believes the formation of the larger television manufacturing division will give the company the market share, and consequently the cash, it needs, to develop the next generation of television equipment. The last major development was the move from black-and-white to colour sets in the 1960s. The next will be into high definition television

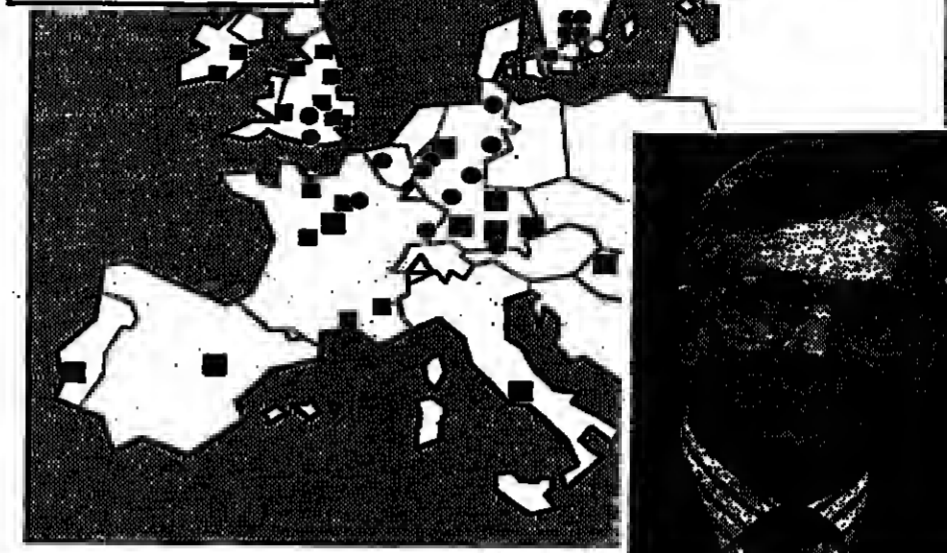
(HDTV), which will provide much sharper television pictures on wider screens. Development work on HDTV is already under way, although the sets are unlikely to reach the mass market before the middle of the 1990s. Nokia intends to be one of the major producers in spite of competition from the Far East. "At the moment the cheapest television sets are made in the Far East, but that is because we are going through the last phase of current television technology," says Jorma Ollila, senior vice president in charge of finance. "In the future it will be the companies with sound technology that will do well. After all, less than 20 per cent of the cost of producing colour televisions goes on labour."

The need to buy market share was equally important in data products. Most major organisations are already equipped with some sort of computer system, according to Kaarlo Isokallio, president of Nokia Data Systems. So the main growth area in the future will be in upgrading computer installations, not in attracting new business. He believes his company has now got a large enough customer base to thrive on that. "The growth of the information technology industry will be about 10 per cent or less in the future - not the 25 per cent figure we've seen in the past," says Isokallio.

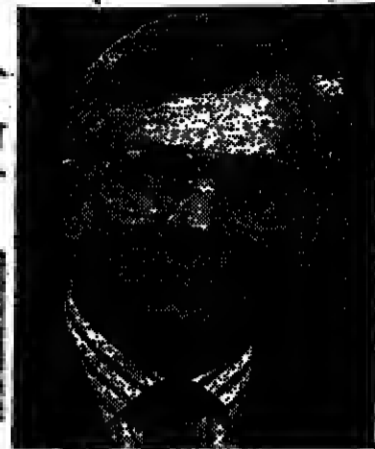
Although Ericsson suffered heavy losses through its data division, particularly in the highly competitive US micro-computer retail market, the company had clawed its way back to the break-even point before Nokia decided to buy. Isokallio believes he can make the company healthy by reducing fixed costs and improving marketing techniques. Even though Nokia's aim is simple, implementation of its "buy-and-integrate" policy may not be so easy to achieve. Isokallio believes the merger of the two computer companies

Production units

- Consumer electronics
 - Information systems
 - △ Cable machinery
 - Paper
 - Others
- Telecommunications
Mobile telephones
Cables
Machinery
Chemicals
Rubber products
Floorings



Simo Vuorilehto



Flying by the seat of the pants - or by numbers

Beneath a softly-spoken, fatherly figure exterior, Simo Vuorilehto, 58, is a rather tough executive who milks his predecessor, Karl Kairamo, is used to making redundancies and cutting dead wood where he sees it. Vuorilehto's personal style, talents and aspirations will clearly cause a number of immediate changes to be made in the way Nokia is run.

First, he will not seek to inherit Kairamo's memberships in various international organisations. Instead, the tasks will be largely delegated to Paavo Rautanen, member of the board of directors and until recently Finland's Ambassador to Washington DC, who will be Nokia's "foreign minister". The highly visible, public relations-minded style of Kairamo was a necessity while the company was establishing its name in international markets. The new chief executive, in contrast, wishes to keep a lower profile.

As one high ranking Nokia official puts it, it was Kairamo who breached the wall of obscurity through which the whole management was able to walk to global recognition. Another contrast with Kairamo is that Vuorilehto will be much more a chief executive than a chairman, continuing to stay elbow-deep in the nuts and bolts of business operations. Kairamo often flew by the seat of his pants but Vuorilehto will fly by numbers.

Vuorilehto claims that the change of pilot will not have any major effect on Nokia's long-term plans. And he is quick to point out that the rapid expansion, which doubled the group's turnover in just about two years to about \$5bn, was systematic and well controlled.

Vuorilehto is the first to admit, though, that the acquisitions, which drained the company of about Fm2.5bn (over \$300m) in 16 months, have put a heavy burden on the group. "It would have been better to spread the acquisitions over three years," he says, "but you can't always choose the timing. You have to act quickly when opportunity knocks."

took an unnecessarily long time. "I thought it would take about four months to bring the two companies together, but it has already taken nearly a year," he admits. However, Nokia maintains that the success it has had in restructuring and integrating the Luxor and Salora consumer electronics companies is demonstrable and a clear indicator of the future profitability of both its re-aligned computer and television divisions. And Vuorilehto flatly denies speculation that Nokia bought more than it anticipated and says that "by the end of this year we have to consider the next offensive move in information systems."

Although acquisition is one of the main planks of the Finnish company's strategy, it has adopted a different approach to cellular radio telephones, where it is the world's number one producer. Success has been largely due to volume sales in the American market, achieved through a joint venture deal signed in 1984 with Tandy, the American high street electronics group. The phones are manufactured in South Korea and then sold through Tandy's shops in the US. As with television sets, the technology for cellular radio has also reached a plateau and Nokia will have to invest in the next generation of equipment if it is to maintain its market lead. The next leap forward in cellular radio will be a high-frequency system using the digital language of computers, and should be in service across Europe in the early 1990s, followed by the US and the Far East. Nokia argues that in spite of the success of the American operation with Tandy, the company's approach to the pan-European cellular radio market must be different in order to satisfy market demands. Instead of going it alone, Nokia has set up a consortium with two other European manufacturers, Alcatel and AEG, to develop infrastructure equipment and handsets for the proposed service. The logic is that the alliance will help spread the development costs for the system as well as giving Nokia a foothold in the EC market. Nokia is likely to adopt a

similarly pragmatic "horses for courses" approach to any future marketing or technology deals, according to Lamri Ratia, Nokia's vice president for corporate planning. Joint ventures, collaborative deals or acquisitions could all be announced in the next year. In addition, the company is divesting itself of many of its smaller traditional Finnish divisions - ten have been sold in just over two years, mainly in niche markets. Nokia already has more locations in the European Community than in Finland and is due to relocate the head office of the television and consumer electronics division to Geneva early this year. The headquarters of two other divisions, as yet unidentified, will also be relocated in Europe during 1989.

Vuorilehto hopes the relocation will also have the effect of luring international managers. "We have to get new people, and people who think differently." Vuorilehto believes it will take up to five years for the new company structure to be consolidated and the new management put in place.

The heavier the weather, the rougher the commercial climate, the more you appreciate stability of premium.

We are a mutual club. So our premiums don't react as violently as some to commercial peaks and troughs. That's one reason why over 50% of the world's containers are now covered by the TT Club. Another is the exceptional care and efficiency with which we handle claims. Quite simply, your interests are ours. As your broker for the new booklet for ship operators, together with membership details. Or contact us.

Through Transport Club
Insurance designed by Ship Operators

THROUGH TRANSPORT MUTUAL SERVICES, LONDON AGENTS OF THE JOINT MANAGERS, HOLLAND HOUSE, 1-4 BURY STREET, LONDON EC3A 5AE. TELEPHONE: 01-253 4948. TELEX: 852548 AND 852571 CABLES: MUTUALITY LONDON EC3. FAX: 01-253 5763. LOCAL CORRESPONDENTS: NEW YORK (212) 737-4900 SAN FRANCISCO (415) 956-4721. SYDNEY (02) 27-3872. HONG KONG (02) 282238

CHANNEL ISLANDS

The Financial Times proposes to publish this survey on:

Wednesday, 1st March, 1989

For a full editorial synopsis and advertisement details, please contact:

MR BRIAN HERON
Regional Manager
on 061 834 9381
(telex 666813)

or write to him at:

Financial Times
Alexandra Buildings
Queen Street
Manchester
M2 5HT

FINANCIAL TIMES
EUROPE'S BUSINESS NEWSPAPER

New Issue
January 23, 1989

All these Bonds having been sold, this announcement appears as a matter of record only.



Osaka Gas Co., Ltd.
Osaka, Japan

DM 130,000,000
5 1/2 % Bonds due 1994

- | | | |
|--|--|--|
| WESTDEUTSCHE LANDESBANK
GIROZENTRALE | | |
| NOMURA EUROPE GMBH | DAWA BANK (CAPITAL MANAGEMENT)
LIMITED | |
| BANK OF TOKYO (DEUTSCHLAND)
AKTIENGESELLSCHAFT | BANQUE PARIBAS CAPITAL MARKETS
GMBH | BAYERISCHE VEREINSBANK
AKTIENGESELLSCHAFT |
| BHF-BANK | COMMERZBANK
AKTIENGESELLSCHAFT | CSFB-EFFECTENBANK |
| DAWA EUROPE
(DEUTSCHLAND) GMBH | DEUTSCHE BANK
AKTIENGESELLSCHAFT | DRESDNER BANK
AKTIENGESELLSCHAFT |
| INDUSTRIEBANK VON JAPAN
(DEUTSCHLAND)
AKTIENGESELLSCHAFT | MORGAN STANLEY GMBH | NEW JAPAN SECURITIES EUROPE
LIMITED |
| THE NIKKO SECURITIES CO.,
(DEUTSCHLAND) GMBH | SANWA INTERNATIONAL
LIMITED | J. HENRY SCHRODER WAGG
& CO. LIMITED |
| SCHWEIZERISCHE BANKGESELLSCHAFT
(DEUTSCHLAND) AG | SCHWEIZERISCHER BANKVEREIN
(DEUTSCHLAND) AG
INVESTMENT BANKING | SUMITOMO BANK
(DEUTSCHLAND) GMBH |
| YAMAICHI INTERNATIONAL
(DEUTSCHLAND) GMBH | | |

To the Holders of

COLLATERALIZED MORTGAGE OBLIGATION TRUST SEVENTEEN

Class A-1 Floating Rate Bonds Due 2018

Notice is hereby given that the interest rates applicable to the above bonds for the interest period January 20, 1989 through April 19, 1989, as determined in the Indenture, is 9.9375% per annum.

COLLATERALIZED MORTGAGE OBLIGATION TRUST SEVENTEEN

U.S.\$200,000,000

CANADIAN IMPERIAL BANK OF COMMERCE

(A Canadian Chartered Bank)



Floating Rate Debentures
Due 1994

For the six months
23rd January, 1989 to 24th July, 1989
In accordance with the provisions of the Debentures,
notice is hereby given that the rate of interest
has been fixed at 5 3/4 per cent. and that the interest
payable on the relevant interest payment date,
24th July, 1989 against Coupon No. 14 will be U.S.\$482.92.

Agent Bank: Morgan Guaranty Trust Company of New York, London

MERGERS and ACQUISITIONS

The restructuring of industry worldwide means it is now essential to keep a close eye on the fast-moving global M & A market. Can you afford to miss out on the acquisitions your competitors are making?

FT MERGERS AND ACQUISITIONS - the monthly Financial Times Business Information magazine - ensures that you are kept informed, by providing comprehensive and authoritative coverage of bid activity worldwide.

Every month, FT MERGERS AND ACQUISITIONS provides: **Comprehensive and easy-to-read statistics** on over 600 bids in the UK, Continental Europe, the US and the rest of the world.

Objective and critical articles on M & A developments throughout the world. Expertise is drawn from the Financial Times' international network of correspondents and from working professionals in the field.

Subjects covered include: Trends and general bid activity during the month ■ Financing techniques ■ Merger regulations and accounting conventions ■ League tables of financial advisors ■ Profiles of individual financial advisors and houses in the news ■ Trends in bids ■ Industry assessments.

FT MERGERS AND ACQUISITIONS is unrivalled for its depth and geographical reach and is an essential working tool for all those involved in M & A activity.

I am inviting you to join our ever-increasing circle of subscribers. You will receive not only the monthly issues of FT MERGERS AND ACQUISITIONS, but also the MERGERS AND ACQUISITIONS ANNUAL, providing a cumulative record of all the year's bid activity.

We will also give you free THE PD2000 POCKET COMPUTER: the world's smallest computer - only 2mm thick and the size of a credit card, and you will be entitled to a 10% DISCOUNT if you send payment with order.

Just fill in the form below today to ensure you receive your copy of FT MERGERS AND ACQUISITIONS every month.

FT Business Information Ltd., Tower House, Southampton Street, London WC2E 7HA, England

MONEY-BACK GUARANTEE
FT Business Information guarantees that if you are not entirely satisfied with your subscription to Mergers and Acquisitions, a refund for all unexpired issues will be sent to you immediately.

Please send me for an annual subscription to FT MERGERS AND ACQUISITIONS of £245 UK/\$270 elsewhere. I claim my PD2000 Pocket Computer, and understand that I can cancel my subscription at any time and claim a refund on the unexpired portion.

BLOCK CAPITALS PLEASE

Name
 Position
 Company
 Address
 Postcode
 Country Tel. No.

I am enclosing a cheque made payable to "FT Business Information" for £220.50 UK/\$243 elsewhere (10% discount for payment with order).
 Please invoice me at the full rate of £245 UK/\$270 elsewhere. (Computer will be despatched on receipt of payment).

RETURN NOW TO: Amanda Collins
 FTBI, Tower House, Southampton Street
 London WC2E 7HA, England
 Tel: (01) 240 9391

Registered Office: Bracklen House, 10 Cannon Street, London EC4P 4BY, England. Registered No: 980896

APPOINTMENTS

Group finance director of Abbey Life Group

■ **ABBEY LIFE GROUP** has made the following changes. Mr Stephen Moran becomes group finance director, and deputy chairman of Lloyds Bowmaker, of which he was managing director. He is succeeded by Mr Alan G. Glass, who was finance director of Lloyds Bowmaker. Mr David A. Beggaley becomes

deputy managing director and finance director of Lloyds Bowmaker. He was finance director of Abbey Life. Mr David E.J. Quick, on secondment from Lloyds Bank as deputy managing director of Lloyds Bowmaker, will shortly be returning to the bank.

■ **Dr Trevor Lawson** has been promoted to research and development director of BENTON & BOWLES in succession to Dr Peter Cornwall, who is retiring. Dr Lawson was general manager of the R&D division. Mr Colin Smith has been promoted to general manager of the project development unit.

■ **Mr Peter Relf** has been appointed assistant director of INDEPENDENT ENGINEERING SERVICES.

■ **Mr Tony Derry** has been appointed chairman of JAMES BURROUGH DISTILLERS, spirits subsidiary of Whitbread and Co. He was managing director and is succeeded by the deputy managing director Mr Andrew Dewar-Purdie from March 1. Mr Norman Burroughs retires as chairman on February 28. Mr Derry also becomes chairman of Whitbread North America and will join the executive committee of Whitbread and Co., also from March 1.

■ **SUTCLIFFE CATERING GROUP**, part of the P&O Group, has appointed Mr J.D. Stirling Gallacher, group managing director, additionally as chairman. He was deputy chairman and succeeds Mr Howard Phelps, who will remain a director and be responsible for the company at P&O main board.

■ **Mr Brian J. Carlos** has been appointed financial controller of A.J. WORTHINGTON (HOLDINGS) and its subsidiaries. He also becomes a director of A.J. Worthington & Co (Leek).

■ **CATER ALLEN JERSEY** has made the following appointments from February 1: Miss Penny Stirling as a director of Cater Allen Investment Management (CI) - she remains group company secretary; and Mr Peter Langton as a director of Cater Allen Financial Services

(Jersey), and Cater Allen Trust Company (Jersey).

■ **Mr Nigel Olsen**, recently a director of St. James SMITH NEW COURT as a non-executive director and chairman of its audit committee.

■ **WARTSILA SECURITY**, Finland, has appointed Mr Conrad Sandler as chief executive of its UK holding company Wartsila Security.



■ **ALLIED IRISH BANKS UK** has appointed Mr Laurence Carr (above) as managing director of Allied Commercial Finance, the group's invoice discounting operation to be launched in April. He was general manager of Bank of Ireland's UK receivables finance company BI Commercial Finance.

He was a main board director of Dorma, and chief executive of Dorma Door Controls.

■ **Mr Stephen Smith** has been appointed a director of FREEMANS, and managing director of buying subsidiary Teplant Corporation. Freemans is the home shopping division of Sears. He joins from Grattan, where he was merchandise director.

■ **Mr Christopher Hawkings** has been appointed deputy chairman of PHILLIPS, with overall responsibility for the valuation department and business development. He was managing director, and is succeeded by Mr Roger Holless who was responsible for UK branches. Both appointments are from March 1.

■ **Mr Gareth Clark** has been elected executive chairman of SOUTHNEWS. He was group finance director and replaces Mr Richard Whitney who remains a non-executive director. Mr Paul Comyn has been appointed group finance director. He was financial controller and retains the post of company secretary.

■ **Mr Kalechro Okawa** has been appointed managing director of Kyowa Finance International, UK securities subsidiary of THE KYOWA BANK. He was deputy managing director, and succeeds Mr Takeshi Masutani who returns to Tokyo to a head office appointment. Mr Hideo Yoda becomes deputy managing director. He was deputy general manager in Tokyo.

■ **SUN ALLIANCE INSURANCE GROUP** has appointed Mr Peter Hardt as group regional manager, Sun Alliance International, Birmingham. He succeeds Mr Tony Cupper, who moves to Sun Alliance Management Services as assistant general manager.

■ **FOREIGN & COLONIAL MANAGEMENT** has appointed Mr R.T. Watson as managing director of Foreign & Colonial Pensions Management. Miss D.J. Copp becomes marketing manager.

■ **BROOKLANDS AEROSPACE GROUP** has appointed Mr T.H. Kerr to the board with responsibility for the serotechnology subsidiary dealing with the development of the Optica, Scoutmaster, and Fieldmaster aircraft, and the Jindivik remotely piloted vehicle.

■ **THE ACER GROUP** has appointed Mr Eric Bridgen as group managing director. He was chief executive at International Military Services.

■ **BRYANSTON INSURANCE CO** has appointed Mr John J. Hobbs to the board. He was with National Vulcan Engineering Insurance Group.

■ **Mr Terry James** has been appointed commercial director



JOHN LAING has appointed Mr John Mason (above) as group purchasing director, in addition to his duties as purchasing director for John Laing Construction.

of ADAMSON MODULAR SYSTEMS, Manchester, part of Tiphook. He was technical director of Tiphook Container Rental.

■ **CARRIER HOLDINGS** has appointed Mr Michael Harvey as managing director of Carrier Service; and Mr D. Paul Smith as managing director of Carrier F&S.

■ **Mr Tony MacHenry** has been appointed a director of COUNTY NATWEST SECURITIES incorporating Wood Mackenzie & Co. He will be senior food retailing analyst for County NatWest WoodMac. He was vice president, retail consulting group, Information Resources Inc., Chicago.



Dr Bryan C. Lindley (above) has been appointed the first chief executive of the NATIONAL ADVANCED ROBOTICS RESEARCH CENTRE, and its operating company Advanced Robotics Research, based on Salford University campus. He was director of technology and planning, BICC Cables.

AT 800 K.P.H.
 WE DON'T
 SERVE
 FAST FOOD.



Club Europe's award-winning cuisine reflects the trend to lighter, healthier eating. It's one more way in which our cabin service is responsive to the demands of our passengers, helping you to arrive at your destination refreshed, relaxed and in good shape for business.



BRITISH AIRWAYS
 The world's favourite airline

ARTS

Elegant genius of the Funniest Woman in the World

Sandy Wilson celebrates the talent of Beatrice Lillie who died on Friday aged 94

At one point in An Evening with Beatrice Lillie, the show which brought her back to London in the 'fifties, she performed what was, we were told, the authentic Japanese Tea Ceremony. The lights went up to reveal her kneeling on the floor robed as a geisha...

All she was a jaded cabaret star: in between verses her dresser appeared bearing jewelry cases for her admirers which Bea slammed, with mounting irritation, into her dressing-table drawer. The second was "I Went to a Marvellous Party..."



Beatrice Lillie in But It's All The Same in 1940

one sketch, in which she portrayed a renegade maid-servant who gets up to some high jinks during her mistress's absence, Miss Lillie, alone on the stage, would recite a nursery rhyme

rambled on for some minutes about their misdemeanours. Finally, "I know!" she cried, "I'll buy a cricket bat, studded with nails, the kind of cricket bat that reaches round corners, and I'll get yonks kittens" - and proceeded with the sketch.

appear, shod in high button boots, but it's the funniest moment in the film. Later Miss Andrews was signed to play Gertrude Lawrence in Star! Noel Coward suggested that he be played by Dan Massey. When the producers approached Miss Lillie for a similar suggestion, she replied blithely "Me of course!"



Krishna Jati in Tara Arts' Government Inspector Ala Afsur

TARA ARTS The realisation that Tara Arts, the professional Asian theatre company, is staging an Anglo-Indian re-orientation of Gogol's Government Inspector leads one to expect gentle comedy à la James Ivory. But Anuradha Kapur's production offers a stylised fusion of elements from east and west, beginning with an exhilarating introduction to the little town "east of east" missed by every ordinance map.

ARCHITECTURE

Factory with a touch of class

Good architecture needs strong patronage - maybe even a client prepared to introduce a bit of Patronage, and the status of a successful commission brings the client, has become more appealing in recent years. That has brought some able smaller architectural practices within touching distance of major commissions and, who knows, perhaps giving some of the visually illiterate large commercial practices pause for thought.

overwhelmed by its backlog of maintenance and has little time and less money for anything architecturally substantial. Meanwhile, Mellor has been replaced on the committee by the chairman of the Wimpey Group - whose architectural commitment is decidedly less overt.

workforce can actually help to manufacture the building, and who has strong design notions of his own. The result is a remarkable building. To begin with, it is round. Since the days of Martello towers, engine houses, windmills and oast houses, round buildings have been somewhat out of vogue.

tively clamps the whole open umbrella shape into place. Take it away, and the umbrella would be flat. The advantage of it all is that the interior is entirely clear of supports; the work-benches, assembly areas and amenities can be sited wherever they are wanted.

Boulez

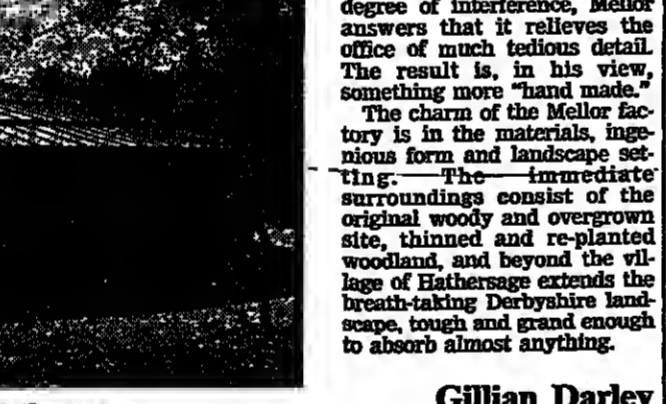
BARBICAN HALL

The final concert in the BBC Symphony Orchestra's five-day Boulez festival began with one of the most wonderful of all his works - Ecrit Multiples. It seems to sum up everything that keeps alive the extraordinary fascination of this composer's music: an idea that takes one form (Ecrit, 1955) and then grows into another and longer (the Multiples addition, 1970) - and at some future date may well, Boulez being Boulez, take still another, a musical set of exquisite sensibility.

Ideas start separating out again. The listener catches glimpses of the weightless, shining sound-world in which this process occurs - high up (the piece gives the magical illusion of being scored only in treble registers) and largely out of reach. The ideas and styles of art on which Ecrit Multiples was generated are currently one of fashion: for the moment art may be palatable, marketable, "easy". The extraordinary thing about this work is the beauty of its sound, which surely transcends all notions and traits of fashion and period.



Michael Hopkins' factory for cutter David Mellor at Hathersage



Gillian Darley

"The Royal Ellington Concert"

The Royal Ellington Concert at the Festival Hall in London tonight is a benefit in aid of the Courtauld Institute of Art Fund, and it is from this source that American clarinetist/saxophonist/arranger Bohn Wiber, who will be presenting the concert and leading a 16-piece band has been able to transcribe the music.

Advertisement for Financial Times and Novotel hotels, featuring the text 'It's attention to detail' and 'like providing the Financial Times to business clients, that makes a great hotel chain.'

Advertisement for 'Travelling on business?' featuring the text 'Enjoy reading your complimentary copy of the Financial Times when you're staying in... STOCKHOLM, GÖTEBORG, MALMÖ'.

ARTS GUIDE

- MUSIC London: Chamber Orchestra of Europe, conducted by Andras Schiff. Vienna: Chamber Orchestra of Europe, conducted by Andras Schiff. Munich: Munich Philharmonic Orchestra and pianist Daniel Barenboim.

January 20-26

- Amsterdam: Joseph Suk (violin) with the Royal Concertgebouw Orchestra. Chicago: Orchestra Symphonique de Montreal conducted by Charles Dutoit. Tokyo: Opera Gala Concert. Tokyo Philharmonic Orchestra conducted by Roberto Patmoser.

Brodsky Quartet

QUEEN ELIZABETH HALL One of the Brodsky Quartet tells a splendid story about how the group wanted to play all the Shostakovich quartets in their college days and ended up trying to write out the parts from records, because the printed music was impossible to find.

Josef Protschka

WIGMORE HALL Josef Protschka, Prague-born and raised in Germany, has won himself an enviable European reputation as a Liedertenor. Word of it reached London in time for his first recital - devoted to Die schöne Müllerin, and sold out well in advance.

Max Loppert

FINANCIAL TIMES

BRACKEN HOUSE, CANNON STREET, LONDON EC4A 4BY
Tele: 8854871 Fax: 01-236 9764/5 Telephone: 01-248 8000

Monday January 23 1989

Debt and Mr Bush

DEBT WILL be among the most visible threads running through the presidency of Mr George Bush. Everywhere he looks, he will find too much of it in the balance sheets of both the Federal Government and the American private sector...

the assets held abroad by Mexican citizens at no less than \$84bn by the end of 1987 and those of Argentines at \$46bn. Such figures suggest that, if policy reform could be both radical and credible, the potential for improved economic performance is very large...

When the "debt crisis" burst open in August 1982, it was mainly viewed as a liquidity problem of importance to the world's financial system. Today, however, the crisis is more properly regarded as a long-term disease of economic development.

Punishing the worthy The danger under the *laissez-faire* policy towards debt is that the opposite will happen, with the largest reductions in debt going, willy-nilly, to those with the most incompetent economic and chaotic political systems...

Banks' strength

Notwithstanding the US share in the responsibility, Mr Bush might feel justified in continuing with an overwhelmingly private solution to the problem. With their greatly strengthened balance sheets the banks are in a position to accommodate various forms of voluntary debt reduction...

Debt is one of Mr Bush's principal headaches, but it also offers him one of his biggest opportunities. If he can also produce the policies required for sustained world economic growth, an imaginative approach to Third World indebtedness may carry a growing number of developing countries towards economic progress and political stability...

Demonstration in Prague

THE VIOLENT reaction of the Government in Prague to the desire of young people to commemorate the self-immolation of Jan Palach 30 years ago, while in Poland and Hungary more serious challenges to the totalitarian regime are taken calmly as a basis for discussion...

entered the country in August 1968. The unprecedented mass emotion which seized the placid Czechs 20 years ago can most plausibly be explained as an acceptance of Palach's human sacrifice as a form of redemption of the guilt feelings of a nation which has, twice in its recent history, preferred humiliation and survival to heaven and death...

Form of redemption

The words repeated again and again at that occasion were "Jan Palach gave his life for us - we must live up to his sacrifice". Such emotion, triggered by the sacrificial death of the young man, needs to be seen in the context of history: the Czechs have not taken up arms in defence of their freedom on a large scale since the religious wars started by the burning at the stake in 1415 of Jan Hus, a political leader of the opposition against the Roman Catholic Church...

Embracing reform

The young people demonstrating in Prague did not live through the disappointments of the older generation. Not having experienced Stalin's terror, they are less fearful. They are able to embrace Mr Gorbachev's reforms as a way of restoring Czechoslovakia as the cultural heart of Europe and of securing a better life for every one of them...

Charles Leadbeater explores the pressures for higher UK pay settlements

Personnel directors preparing to negotiate pay increases in next few months are probably starting to feel edgy.

Pay settlements are showing signs of rising from about 6 per cent in the middle of last year to an average of 7 per cent, in the wake of the rise in inflation to 6.8 per cent. By March, inflation could have risen to more than 7 per cent, and pay deals concluded this month will start pushing average earnings figures for the early spring to more than 9 per cent.

Employees who have grown used to rising real earnings during a period of stable inflation could become increasingly agitated. Companies are likely to face more intense pressure for higher pay than for several years.

A recent survey by the Confederation of British Industry found that 42 per cent of companies thought the cost of living would be a very important upward pressure this year, compared with 31 per cent last year. Higher inflation may make life more uncomfortable for companies. But as yet it hardly marks an upsurge in disruptive pay pressure.

The personnel director of one of the country's largest manufacturers, which is due to start negotiations in March, says the confederation's annual pay and performance briefing last autumn expected higher inflation to be no more than a temporary blip.

The next few months will be a vital test of whether the Government's trade union reforms, and companies' more assertive, innovative approaches to employee relations, have eradicated one of the British labour market's key characteristics: the tendency in real terms of pay to go up much faster in periods of economic growth than it falls in periods of recession.

There is no doubt the labour market, industrial relations and approaches to pay have changed in the last few years. The question is: have they changed for the better?

The rise in inflation could not have come at a worse time of year. Although the sequential "pay-round" of the 1970s has largely disintegrated, with pay settlements spread throughout the year, the next three months are particularly important. A third of all reviews are conducted in January or April.

The rise in the cost of living magnifies the impact of factors which have been pushing up pay for two years. Increases in productivity and profitability, combined with stable inflation, have fed workers' expectations of annual earnings growth of 7.5 per cent a year has become a fixed point in the economy around which economic policy, company strategies and workers' pay expectations are formed.

Mr Alastair Hatchett, editor of *Incomes Data Services* bi-weekly pay report, says: "Although companies may plead impending poverty in 1989-90, they will be declaring profit figures based on strong trading performance in 1987-88. That is what workers will concentrate on."

Strong output growth in 1988 has pushed up overtime working in manufacturing, and with it earnings. But high overtime also a strong incentive to employees that the companies need them, and their employment prospects are secure. Overtime is at its highest level since the 1950s; 15.4bn overtime hours were worked in the first nine months of 1988, compared with 12.6bn in 1987. About 41 per cent of the manufacturing workforce worked overtime last year, compared with 36.6 in 1987.

Overtime has been fuelled not only by strong output growth but also by



A struggle to turn down the heat

skill shortages. Companies are asking the skilled staff they have to work longer hours.

Skill shortages in themselves are a strong pressure on pay. CBI surveys have found that about a third of companies expect difficulties in recruiting and retaining staff to be a very important factor in the early part of 1989, as high a proportion as in 1986-87.

The decline in the number of school leavers, and the gradual shift towards smaller but more skilled workforces, means that recruitment and retention of skilled workers will be an upward pressure on pay for some time.

The relatively affluent finance sector plays an important part in the competition for young people and skilled workers - and thus in the pay-setting process. The personnel directors of the clearing banks and building societies have become the barons of the labour market in the late 1980s, engaged in a continual competition to outbid one another with special allowances for staff in an area stretching from Cambridge to Southampton and Bristol.

Pay deals in the finance sector and in profitable manufacturing companies - with smaller, skilled, unionised workforces - have created inescapable pressures for public sector employers. Last year Mr Kenneth Baker, the Education Secretary, set a cash limit on teachers' pay of 5.1 per cent from April 1989, when inflation was running at 3 per cent. That meant that the teachers may get an award which is 3 per cent below the April inflation rate.

The Armed Forces Review body will want increases attractive enough to put the forces in a strong position to recruit young people, and retain skilled signals staff who could get much more in the electronics and engineering industry. Nurses' pay is still a sensitive issue and the nurses' pay review body will have to start adjusting pay scales soon if the service is to recruit the young people it needs.

Despite all these pressures, the CBI is confident that the higher inflation rate will be short-lived and pay will be brought under control.

The decentralisation of collective bargaining in the 1980s, with companies breaking free from industry-wide agreements, has produced a much wider range of settlements. Companies are able to insist on increases below the going rate if they face difficulties in their product markets, says Mr Thomas. More decentralised bargaining should make it more difficult for pay momentum to build up.

Others argue, however, that the going rate has not disappeared but is merely taking a different form. Professor William Brown, of Cambridge University's Economics and Politics Faculty, believes companies are having to match pay rises granted by their competitors to ensure they can recruit, retain and motivate staff as well as

competitors. This a 7 per cent deal for Boots' manual workers agreed recently is the first in a season of pharmaceutical industry settlements which ends in July with Glaxo. Even if inflation has fallen by the summer, Glaxo will still be under pressure to concede 7 per cent because of the Boots deal.

This mix of decentralisation and drift has created a dangerous paradox, Mr Brown says: "If firms' pay rises are tending to chase those of other firms in their industry, at a time when the industrial employer organisations which might have imposed discipline are in continuing decline, it is hard to see what might contain Britain's endemic inflationary problems."

Mr Hatchett believes the finance sector may be as effective in spreading pay pressure nationally as Ford was in the 1970s. As he puts it: "Every town has banks, and next to them building societies. Finance sector pay pressure can affect every area in the economy."

The CBI is confident, however, that for companies' unit costs the effects of higher pay could be offset by continuing strong productivity gains, in large part produced by heavy investment in new technology over the last year.

Mr Thomas says: "At each presentation (to employers) in recent years we have told them it was unlikely productivity growth could be sustained, and each year they have proved us wrong."

None the less, there must be doubts over whether manufacturing productivity growth can be sustained. Some of the recent productivity gains have been due to strong output growth; productivity growth may slacken as

economic growth falls. Many manufacturing companies are already operating with smaller workforces, more flexible working practices and new technology. It will become more difficult to reap productivity gains through shedding labour and attacking demarcation lines. In future, improved training and time management will become more important, to allow companies to make better use of flexibility.

But perhaps as important as the quantifiable effect of inflation on unit costs is the threat to companies' flexibility bred by a period of low, stable inflation has been vital to allow companies to introduce sweeping changes in working practices, industrial relations and payment systems.

Long-term agreements to allow complex changes in production methods and working practices are setting the pace for change in manufacturing. It is easier for companies and unions to sign long-term pay agreements if inflation is fairly predictable. The uncertainty over inflation is likely to make unions increasingly wary of signing such deals. The spread of long-term agreements, to renew them, as unions will be pressing for inflation proofing. Companies would have to cede part of their control over pay to the vagaries of the inflation rate.

If long-term agreements are curtailed, the pace of change in the most innovative companies could slow; this pressure for change in smaller companies could also ease.

Uncertainty over inflation could also set back companies' attempts to reform industrial relations and introduce more individualised, flexible payments systems. It will make collective pay negotiations more important to workers, and thus rebuild the importance of union membership as a defence of employees' standard of living.

Performance related pay systems are already being distorted by an accretion of special payments to recruit skilled staff, which are a measure of workers' scarcity value rather than their performance. The most significant moves towards regional pay have not come in the north (to link lower pay rates to higher unemployment) but in the south-east (with the spread and rise of special allowances). Many companies need a period of stability to adjust their pay structures for different grades of staff. Moves towards harmonisation of blue- and white-collar terms and conditions; changes to job descriptions and responsibilities in the wake of new technology; the disruptive effect of *ad hoc* payments to attract key staff; the need to improve youth wages; to attract more young people - these have all undermined the rationale of pay grading systems introduced in the 1970s.

But, instead of having a time of stability to sort out these problems, employers will be faced with further turbulence.

So, a period of higher, more volatile, inflation will not just affect companies' costs and competitiveness. It could seriously handicap employers who are attempting a longer term restructuring of employee relations in hopes of improving corporate performance.

Mr Thomas remains confident that pay bargaining has changed enough to allow companies to overcome pay pressures. "It will be another year, significant for a period, but it will blow itself out."

Mr Hatchett is more pessimistic, for he believes that, despite change in the forms of pay bargaining, the labour market has retained its unruly inflationary potential: "It will take something like a mini-recession to put a stop to this."

Deep waters in Holland

Ever so gently, the Dutch are venturing back into what we know from the British experience is one of the most sensitive areas in any country's shopping hours.

Along with the West Germans, the Dutch have the most restrictive shopping regime in Europe. It is also rather complex. Dutch stores can stay open for a total of 52 hours a week, about 10 in the Federal Republic. Yet they must close no later than 6 pm, except on the one officially designated "shopping night".

There are a few exemptions, known as "night shops". For the rest, however, the doors are shut early on Saturday afternoon: there is no Sunday trading and, because of the restrictions on hours, many shops do not re-open until around lunchtime on Monday.

Debate has raged for years over whether the law should be relaxed. A new bill has now been tabled in an effort to reach a compromise, but seems likely only to stoke the controversy.

Two Christian Democrat MPs are proposing that municipalities should be allowed to designate a second "shopping night", although the doors would have to be closed at another time to make up for it, since the 52-hour ceiling would remain. The governing Christian Democratic Party has been one of the main opponents of longer hours; the new bill is, in fact, an attempt to pre-empt more radical proposals.

This is designed to be a bridge between the various proposals which have reached an impasse, says Hajo Schartman, who is co-sponsoring the bill.

Already the Christian Small Business Association, NCOV, has castigated it as "superfluous". Besides NCOV, leading the opposition to the bill are groups representing small fam-

OBSERVER

ly shops and the trades unions. Their arguments vary from saying that longer business hours would disturb their social life to claiming that consumers would not buy enough to justify the extra labour and overhead costs. The Christian Democrats fear that the family would be undermined.

Proponents are large store chains, divorce associations and consumer groups. They say that growing numbers of working couples, one-parent families and single and two-person households must be able to shop after work. The political betting is that the whole issue will prove too difficult and will be shelved until after the general election next year.

Proponents are large store chains, divorce associations and consumer groups. They say that growing numbers of working couples, one-parent families and single and two-person households must be able to shop after work. The political betting is that the whole issue will prove too difficult and will be shelved until after the general election next year.

Proponents are large store chains, divorce associations and consumer groups. They say that growing numbers of working couples, one-parent families and single and two-person households must be able to shop after work. The political betting is that the whole issue will prove too difficult and will be shelved until after the general election next year.

Proponents are large store chains, divorce associations and consumer groups. They say that growing numbers of working couples, one-parent families and single and two-person households must be able to shop after work. The political betting is that the whole issue will prove too difficult and will be shelved until after the general election next year.

Proponents are large store chains, divorce associations and consumer groups. They say that growing numbers of working couples, one-parent families and single and two-person households must be able to shop after work. The political betting is that the whole issue will prove too difficult and will be shelved until after the general election next year.

Proponents are large store chains, divorce associations and consumer groups. They say that growing numbers of working couples, one-parent families and single and two-person households must be able to shop after work. The political betting is that the whole issue will prove too difficult and will be shelved until after the general election next year.

Day's new job

One of the main reasons why Day agreed to be chairman-designate of Cadbury Schweppes is that he had just about enough of working in a nationalised industry where he was accountable to just about everyone: Parliament, the media and the Prime Minister. Another was that he was unlikely to become chairman of British Aerospace, where Professor Roland Smith remains in the saddle after taking over the Rover Group which Day once led. And a third reason was that Day wanted to be chairman of a bigish company without being chief executive as well.

According to close friends, a lot of companies were in the market for him, but Cadbury Schweppes was one of the very few to guess that he would like to do without the chief executive title. He wants some freedom. The arrangement was made over six months ago and Day became a non-executive director of Cadbury Schweppes last year.

For the confectionery and soft drinks group, Day brings his experience of North America. General Cinema, the US concern, holds a near 20 per cent in the company and bidding could become more active at any time. Day will be expected to help with the defence.

He will continue to give half his time to the Rover Group, but not indefinitely. At 55 he wanted a contract that has something more at the end of it than "Thank you and good-bye."

He will continue to give half his time to the Rover Group, but not indefinitely. At 55 he wanted a contract that has something more at the end of it than "Thank you and good-bye."

He will continue to give half his time to the Rover Group, but not indefinitely. At 55 he wanted a contract that has something more at the end of it than "Thank you and good-bye."

He will continue to give half his time to the Rover Group, but not indefinitely. At 55 he wanted a contract that has something more at the end of it than "Thank you and good-bye."

Fighting game

I watched Ireland play France on Saturday only on television, but nothing could have been a more effective reminder of how much better a game it is than the one football. Yet surely should have raised more eyebrows.

At one stage in the first half about five players on either side were throwing punches at each other, almost as if in some medieval combat. Nobody seemed to mind. After

wards the game became even better. It is not like that at Chelsea.

wards the game became even better. It is not like that at Chelsea.

wards the game became even better. It is not like that at Chelsea.

wards the game became even better. It is not like that at Chelsea.

wards the game became even better. It is not like that at Chelsea.

Advertisement for Grimley IR Eve, a chartered surveyor. Text includes: 'A balance of skill and flair', 'In buying, selling, letting or seeking properties, do you have the necessary up-to-date knowledge and understanding to handle your requirements effectively?', 'Do you have sufficient experience of national and local markets, and an ability to respond to opportunities quickly and positively?', 'Your property assets cannot perform in the absence of specialist knowledge and a co-ordinated balance of skill and flair.', 'Grimley IR Eve', 'CHARTERED SURVEYORS', 'London 01-898 1515, Brighton 011-236 8236, Bristol 0272 277178, Exeter 0322 442074, Manchester 061-894 7187', 'YOUR PARTNER IN PROPERTY'.

In a crush of brightly coloured trading jackets, wild hand signals and raucous voices, millions of dollars change hands every day in the world's largest commodities markets in Chicago.

But the Windy City's main futures exchanges are on the defensive as their long-established trading systems come under attack in a multi-million dollar fraud investigation by the Federal Bureau of Investigation.

Both the Chicago Board of Trade, which traded 143m contracts last year, and the Chicago Mercantile Exchange, which traded 78m contracts in 1988, have received writs requiring them to provide membership records and trading data for the last six years as part of an FBI inquiry that could reveal the scope of Wall Street's insider trading scandal.

While the FBI has declined either to deny or confirm reports of the investigation, traders are describing an intricate tale of FBI undercover work in the city's futures markets.

Several established traders at the Chicago Board of Trade (CBOT) mysteriously disappeared on Tuesday night, and their trading accounts and trading pits for the rest of the week.

Floor traders believe these to have been FBI agents who were working undercover with hidden microphones to tape conversations in the crowded commodities trading arenas.

"I was quite friendly with the guy in the soybeans pit," says Mr Bud Frazier, a long-established grain trader at Chicago brokerage Balfour Maclaine. "Now all the traders who stood around him have been subpoenaed."

FBI agents are understood to have been working undercover for up to two years as traders at firms in the Board of Trade's maize and Treasury bond futures pits as well as the soybeans arena. The inquiry at the Chicago Mercantile Exchange (CME) is known to involve traders in the exchange's yen and Swiss franc futures contracts.

The agents' trading accounts and seat prices on the exchange are thought to have come from money in a special FBI fund for undercover work. While some agents adapted well to their trading careers, others reportedly lost money.

"We used to wonder why he came back every day after losing money," remarked one trader of the agent in the Swiss franc futures pit. The affable agents ingratiated themselves with members of both exchanges, often meeting young traders after work at restaurants. They would lead the traders to a bar for a discussion of trading abuses. "But they didn't seem nosy," one trader commented.

Many of these traders have now been subpoenaed and are being asked to give evidence against trading abuses and fraudulent practices. So far, traders at the Board of Trade are aware of 24 subpoenas, but believe this could just be a start.

If convicted of cheating customers, traders could face charges ranging from conspiracy and violations of federal commodities law to charges



The agricultural trading floor of the Chicago Board of Trade

Deborah Hargreaves reports on the FBI fraud investigation that has jolted Chicago's commodities markets

Fear and loathing in the futures pits

under the powerful Racketeering Influenced and Corrupt Organisations Act (RICO), which has been used against Wall Street firms.

The FBI is understood to be hearing evidence from a range of traders and has subpoenaed both futures exchanges to provide trading documents dating back to 1983. These include a multitude of disciplinary and complaints files as well as back-ground documents on exchange members and their financial holdings.

The investigation into malpractices on the trading floor is likely to lead into some firms' back-office operations where millions of dollars could be involved, according to some traders. The FBI is aiming for the top in asking floor traders to testify about policy at their trading and clearing firms.

Trading in Chicago's commodity markets is still executed by the time-honoured practice of open outcry. This involves each trader acting as his own auctioneer as he yells out his bids and offers in an arena with as many as 500 other jostling players. The shouting is backed up with a

series of frenetic hand gesticulations and trades are jotted down in pencil on a trading card that is handed in at the end of the day.

The wild West nature of the trading pits can be a breeding ground for abuse. "I think everyone is hard-pressed to keep things straight," says Mr Frazier, "but I believe that 99.5 per cent of the people in this business are honest."

Several recent cases of fraud have chipped away at the integrity of the exchanges have so vociferously tried to preserve. But the current investigation is by far the most wide-reaching of any commodities inquiry launched in the US.

The trading abuses under investigation are reported to involve an array of malpractices. These include pre-arranging trades, profiting from tampering with customer orders and front-running - that is, trading before a customer order that is large enough to swing the price of a commodity.

Some traders are alleged to have used a technique called "bucketing" to defraud customers. This involves taking the opposite side of a customer's trade privately rather than offering it to open auction - a method by which the broker can profit by not always giving the customer the best price available.

Mistakes are inevitable in the often chaotic trading atmosphere at the exchanges, traders say, and clearing houses require traders to make good their own errors. This can tempt floor traders to cover the cost of their trading errors - and often make a profit on top - by manipulating customer accounts.

Mr Anton Valukas, the US attorney for northern Illinois, has repeated his commitment to tracking down commodity fraud and white-collar crime at Chicago's futures exchanges. Earlier this week, he charged 18 former employees of a Chicago commodity firm with racketeering.

Mr Valukas has claimed that fraud is widespread in Chicago's commodity markets. His assertions were repeated by a US district judge who called an elaborate trading scam for which he recently passed sentence, "the tip of the iceberg". The judge infuriated CBOT officials by calling the

exchange a "cesspool" of corruption.

The current publicity over trading fraud in Chicago could not have come at a worse time for the city's exchanges. Both have successfully managed to deflect criticism levelled at their markets in the wake of 1987's stock market crash, and have so far avoided increased regulation of their strongly-defended free markets.

But the futures regulatory body, the Commodity Futures Trading Commission (CFTC), is due to be re-authorised by Congress this year, and widespread allegations of fraud in the futures markets would inevitably be used as a call for tougher oversight of the industry.

A spokesman for the CFTC declined to comment on the investigation reports. But he did say that if there proves to be any truth in the allegations, it would force the oversight committee to take a long, hard look at the markets.

Chicago's exchanges have been extremely wary of tighter regulation that would put up the cost of doing business in the city and force investors to look elsewhere.

The CFTC is widely seen as being less stringent in its regulation than the Securities and Exchange Commission (SEC) which oversees the equity markets. Much of the responsibility for oversight is left to the futures exchanges themselves, as self-regulatory bodies.

The two federal agencies have engaged in something of a turf war since the stock market crash and many traders have called for the SEC to extend its influence in the futures industry. Congress has also toyed with the idea of merging the agencies into one body - a suggestion that is bound to have another airing in re-authorisation hearings.

The exchanges themselves have been a lot more vigorous in pursuing fraud over the last two years, according to Mr Arthur Hahn, commodities lawyer at the Chicago firm of Katten, Muchin and Zavis. Both exchanges have a wide variety of recent abuses on their disciplinary books for which they have levied large fines.

Two years ago, the CME was forced to introduce special rules for so-called "dual" traders who trade both for themselves and for customers, after a barrage of customer complaints about trade executions in the exchange's Standard & Poor's 500 stock index futures pit.

News of the investigation shook traders on the exchanges late last week. "It's driving us nuts," one trader moaned, "but if it is going on, I'll be glad to get it out of here." The price of a seat on the Chicago Board of Trade dropped by \$35,000 on Thursday to \$410,000, but trading volume did not appear to have suffered.

Commodity traders are a loyal breed and many have rushed to defend their markets. "This only happens when ambitious, young prosecuting attorneys want to make a name for themselves by abusing RICO and scaring people into testifying," fumed Mr Paul McGuire, who has been trading grains at the Chicago Board of Trade for 40 years.

LOMBARD

The rethinking of socialism

By John Lloyd

THIS YEAR should see the fruit of two efforts of thought on the part of the British left. The first is Labour's policy review; the second, the early offerings of the Institute for Policy Research, the left-leaning think-tank.

The policy review is unlikely to fulfil the high hopes which were invested in it. It certainly has not been, and now probably cannot be, the brainstroming many hoped for. Certain to be adopted by the party conference in October, it will contain some new formulae which its spokesmen and women may find useful - but that is probably the limit of it. The Big Idea has not been found - but many, including Mr Roy Hattersley, Labour's deputy leader, would argue that it has never been lost and is called socialism.

The think-tank looks more promising. Its appointed director, James Cornford, now director of the Nuffield Foundation, is a man whose unshakable instincts may serve the cause of alternative thinking well.

He already has a list of themes he wants the institute to tackle. It is headed by an examination of what will be the likely constraints on a future government of global interdependence and of the single market in Europe. That is followed by a look at the case for the public sector, with some emphasis on efficiency and on the place of worker benefits in privatisation.

He also wants the institute to map out the terrain likely to be inherited by any government of the 1990s in education, in the environment and in the sphere of arms control. He will undertake research on constitutional issues (not, curiously, on proportional representation, though he is a believer himself). The first two subject areas in particular go to the very heart of the policy dilemmas of the opposition parties. If he can succeed in developing sturdy and practical thinking there and elsewhere, he should ensure:

(a) That there will be available policy thinking which is more than just a lick of market-oriented paint on tired old ideas, but derives part of its logic from an intelligent anticipation of the future real world.

(b) That this policy will be non-utopian and capable of tackling vested interests when they lie athwart the general good.

(c) That the inflation of rhetoric in the non-Tory strand of politics, always threatening to lurch into lurid denunciations and forecasts of catastrophes and tyrannies which never materialise, will be punctured by rational thought rigorously addressed to real problems and the activities of real people. That, in turn, should make debate much less unequal; and allow those who have longed to do so to turn their reason, rather than their sentiment, loose upon alternative policies.

The flaw, which may be a great one or may not matter, is this: Cornford has deliberately chosen a way of working which is not concerned to reassert or re-establish an overarching philosophy, where the right of thinking in itself has attacked nothing so vigorously - at least in their early days - as the conservative past, seeing it as crypto socialist, he takes for granted there is an area of politics called socialism, or social democracy, which simply needs some new and sensible concepts to form the basis of government once more.

It may be that there is nothing else for it: that any investigation of "what is socialism" begins so many philosophical, historical and political questions that it must perforce be left to the professors who might come to a view on it by the end of the millennium. Yet to take this hard-headed approach is to risk being pushed back by inches on a slippery slope, unable to declare that here, precisely here, is a stand to be made.

The problem with British socialism/social democracy/liberalism is that it is such a mishmash of pro- and anti-market sentiment, channelism and internationalism, utopianism and nit-picking, idealism and petteenness, messianism and vested interests, that it might need to be given a steep anchor before it can stop bobbing about long enough to concentrate on the specifics.

LETTERS

Reasoning with the money supply

From Mr Aubrey Jones.
Sir, Mr Frank Blackaby's article on inflation (January 9) and the resulting letters both seek to explain the present rate of inflation by either too fast rising wages or too much money. In a complex society it is implausible that any one phenomenon, if it can be isolated, can be explained wholly by either one thing or another.

Yet if the supply of money is increased reasonably, but the government of the day propagates the doctrine that when economic agents pursue their self-interest they automatically promote the general interest, then employers and employees will feel free to bid or force up wages, and this also will probably generate inflation. Inflation from this cause will be aggravated if employers, believing in the beneficence of market forces, prefer to "buy" labour from other employers and other regions rather than train the labour force here. In this sense Mr Blackaby is right. Professors Caple and Wood

(January 17) write of "policies [presumably fiscal and prices and incomes policies] which have been tried and failed." It could also be said that in the course of the 1980s the attempt to eliminate inflation by restricting the supply of money has in its turn failed, in that it has been complemented by an attempt to keep stable the value of the pound in terms of the currency of West Germany, a country, be it noted, with different social institutions. Aubrey Jones, 120 Lismore Lane, Fife, Angus, West Sussex

No comparison

From Ms R.H. Galvin and Mr R.A. Revel-Chion.
Sir, We refer to David Waller's article which looks at Rowntree after six months of Nestlé control (January 19).

We take issue with the comparison made between Rowntree's retained authority in the UK, including the added responsibility for developing Nestlé's worldwide confectionery business, and imagining Grand Metropolitan giving Pillsbury control over its world strategy for food.

Pillsbury was indeed similarly acquired for its major brands and to give Grand Met a market presence. The North American food giant, however, was greatly troubled by second-rate businesses, poor marketing, a high turnover in management and plunging profits.

This is hardly analogous to the situation at Rowntree, a highly profitable organisation with an untainted record of success which already had the strategy and proven expertise to exploit the benefits of a truly liberalised Common Market.

R.H. Galvin and R.A. Revel-Chion, Rowntree Pension Trust Limited, York

Taking your claim to the board

From Mr Maurice Healy.
Sir, In the debate about non-fault compensation to be established, Consumer Fees, A.H. Hermann's piece (January 19) on compensating accident victims is both timely and to the point.

The National Consumer Council is considering ways in which the rules, complexities and delays in the law which deter many consumers from pursuing their claims might be circumvented. One proposal we are looking at is for a board, staffed by experienced personal injury lawyers, to be established. Consumers who thought they had a claim would apply to the board, which would assess the value of the claim on the basis of accident and medical reports. The board would then offer to buy the claim from the consumer, probably for a proportion of its assessed value.

claim to the board. However, like an insured who has been compensated he would be under a duty to assist the board in pursuing the claim. It could be expected that the board would skilfully pursue any claim and that few cases would reach the courts. If the consumer chose not to accept the offer he would be free to pursue his own case. Maurice Healy, National Consumer Council, 20 Grosvenor Gardens, SW1

Approaching the issue of pre-emptive rights

From Mr Roderick Dewe.
Sir, Your Lex correspondent misses a number of points in his analysis of the Treasury's stance on pre-emptive rights on new issues for cash (January 18):

● The institutions' guidelines do allow some breach of the principle already. So of course does the law, provided shareholders consent.

Of course the shareholders of a company are its owners, and of course the views of the majority should prevail. But when our fiscal structure is such that it drives so much of our long-term savings into the institutions, and when they are so well organised that they can represent their own interests so forcefully, surely there should be a countervailing pressure to allow companies to approach a wider base of investors if their managements conclude it is to their organisations' commercial advantage.

You seem to imply that the privatisations show that the public will only buy shares directly if they think they are being given something for nothing, but that the institutions are grown-up enough to buy shares on the individual's behalf at the full market price - whatever that means. I sincerely hope fund managers do not totally abandon their hunt for undervalued instruments in favour of indexing their portfolios, but neither would they claim that they were the only people who can spot a good deal. It is patronising and insulting to the private saver to presume otherwise.

● Most chief executives of listed companies consider the rights system for raising equity capital expensive and restrictive.

You conclude that since 75 per cent of the shares in our listed companies are owned by institutions, and since they have gathered together to lay down the pre-emption guidelines, companies and others should bow to their wishes. This is tantamount to saying that you are happy to maintain the existing channels for providing new capital for industry (now virtually all institutional money) and that any attempt to get institutions to soften their stand on pre-emptive rights, so as to allow other sources of funds to come into play, is misguided.

In particular, why should they be precluded from recruiting overseas investors as a new source of capital? A first, perhaps uncontroversial, step might exist if the corporate bond market were to reappear in any force. A new class of medium-term capital from a company with a strong national brand might be just the thing to attract the British saver at large, particularly in London Wall, EC2

THE KEY TO SERVICE IN DISTRIBUTION



One of the keys to success in grocery retailing is having the right products in the right quantities in the right place at the right time. UCD are amongst the leaders in Temperature Controlled Distribution offering extensive multi-user and dedicated operations. UCD meets individual customer requirements by using the latest technology within a Nationwide Distribution Network that includes 7 Regional Distribution Centres, offering multi-user facilities and 7 Dedicated Distribution Centres. A team of professional staff and a vehicle fleet numbering over 400 vehicles provide the necessary back-up.

- ▶ STREAMLINED ADMINISTRATION IS COMPATIBLE TO THE CUSTOMER'S SYSTEMS AND REQUIREMENTS.
- ▶ ORDER PROCESSING AVAILABLE THROUGH TELE-ORDER OR DIRECT DATA TRANSFER.
- ▶ CONSOLIDATED SCHEDULED DELIVERIES REDUCE BACK DOOR CONGESTION.

UCD

ST IVEL LTD, DORCAN HOUSE, ELDENE DRIVE, SWINDON, WILTS. SN3 3TU
TEL: 0793 488333 TELEX 449250 FAX: 0793 610448

18
communidata
 EFFECTIVE
 HI-TECH PR
 Tel (0990) 27111

FINANCIAL TIMES

Monday January 23 1989

brother
 MICROWAVES
 KNITTING MACHINES - INDUSTRIAL AND
 DOMESTIC SEWING MACHINES

By Janet Bush
 on Wall Street

Risk, return and lunch at the desk

MR MARTY Zweig, whizz Wall Street forecaster, rarely takes lunch away from his desk. It is not unusual for him to track Tokyo markets until the early hours of the Manhattan morning. His office sports mementoes of the stock market past with walls lined with valuable old share certificates and a set of ancient ticker tape machines. He is very successful.

This may all smack of the over-earnestness which sometimes makes Wall Street a rather dull place but Mr Zweig seems to combine a formidable appetite for work with a genuine excitement about his job and a sense of fun.

The tapes apart, his office is crammed full of toys and gadgets which, he says, are necessary to relieve the tension when the markets get tough. "I am not a happy camper when my funds are at a discount," he says.

There is a four-foot red toothbrush, a gift from Drexel Burnham Lambert who went on a road show to launch Mr Zweig's first fund and was impressed with his devotion to dental hygiene. There too is a Ouija board, a way of connecting with friends about the scientific nature of stock market forecasting.

Mr Zweig says he does not attempt to forecast the market, merely to measure risk. "It is a probability game but I play the game out of my own pocket when the risk rises, you can beat the market," he says.

He was one of that celebrated band which called the October crash. He cut his stocks exposure from 85 per cent to 42 per cent on Labour Day - September 5, 1987.

If subscribers to his newsletter, the Zweig Forecast, took his advice, they would have been up 9 per cent on Black Monday. "I knew it was going to be a great day for us but it wasn't that good a feeling. It was like sitting in a lifeboat and watching the Titanic go down."

In 1987, his Zweig Fund gained 14.4 per cent in value. Mr Zweig is a self-professed perfectionist. While acknowledging that his fund did pretty well in the year of the crash, he wishes now that he had cut his equity exposure by another 10 per cent and made even greater returns for his clients.

The Zweig Fund, with just over 350m under management, was up 17.1 per cent last year despite Mr Zweig's cautious attitude to the market. "I am not out to beat the bell out of the markets of the world; I just want to do OK."

Unfettered by being responsible for clients' money, Zweig Partners, an internal fund, gained a sparkling 67.5 per cent in the year of the crash and was up about 40 per cent last year.

Mr Zweig's formula is the fruit of long years and is a lot less complicated than some of the quantitative, computer-dependent models used by other money managers. He uses a stocks model and a bonds model the movements of which trigger changes in the weighting of his portfolios. Does he follow their signals religiously? "Oh yes, I am no hero."

His bond model, which took six years to build, relies on a mix of inflation indicators, trend analysis, short-term interest rates and simple mood.

The models signal a buy or sell. The value added comes from careful stock selection. Responsible for what has been described as a backwash of anger and frustration which could have serious long-term consequences for all involved.

The row has forced computer makers and software vendors into a series of unlikely alliances. It centres around Unix, a software system (operating system) to control the operations of small and medium sized computers originally developed by AT&T.

Probe into buying of Guinness Peat shares

By Nick Bunker in London

A BUNDLE of documents detailing what appears to be covert buying of the shares of the UK's Guinness Peat financial services group (GPG) has been shown by Bank of England officials to the Serious Fraud Office.

The documents are understood to have arrived at the Bank from an anonymous sender in the middle of last year. They then prompted an investigation by the Bank and by the Stock Exchange into allegations that the share-buying was by Australian companies linked to Equitcorp International, the New Zealand-based group which took 61 per cent control of GPG

in October 1987, just before the equity market crash.

When Equitcorp took over GPG, it financed the deal with loans from 28 banks, with the GPG shares as collateral. Any large-scale buying of the group's shares would have had the effect of supporting GPG's share price.

News of the investigation emerged in the aftermath of Friday's announcement that Equitcorp has called in provisional liquidators after failing to clear a debt burden of NZ\$1bn (\$628.9m).

Purchases of GPG shares are understood to have been looked at. One purchase was before the 1987 crash and another in early 1988, before the demerger in which GPG spun off Guinness Mahon, the merchant bank which it previously owned.

The Bank is understood to have taken the documents seriously, because they appeared to raise questions about whether Equitcorp was a fit and proper party to control Guinness Mahon, in which Equitcorp still has a 61 per cent holding. The Bank passed the documents on to the Stock Exchange before drawing them to the attention of the Serious Fraud Office.

News of the investigation astonished officials at Guinness Mahon, which has been operating in complete independence of GPG and Equitcorp. The Marquess of Doro, who last November became deputy chairman of Guinness Mahon and chairman of its executive committee, said he was unaware of any approach to the bank by the investigators.

Mr Peter Quinnen, chairman of James Capel, which advised Equitcorp on the demerger, is travelling overseas and was unavailable for comment yesterday. His deputy, Mr David Dugdale, said he knew nothing about any investigation. "I'm waiting to hear more when I get into work," he said.



A Korean student launches an attack on police during an anti-government demonstration by 10,000 workers, students and dissidents in Seoul on Sunday

Seoul dissidents' united protest

Our Foreign Staff

SOUTH Korean riot police clashed in the capital Seoul yesterday with thousands of demonstrators calling for the overthrow of President Roh Tae-woo and the expulsion of US troops.

The protest was the first action of the Coalition for a National Democratic Movement, an umbrella organisation of about 20 dissident groups, which was formed on Saturday.

More than 10,000 workers, students and dissidents massed peacefully in the streets before heading for the headquarters of President Roh Tae-woo's ruling Democratic Justice Party several blocks away.

They were blocked, however, by about 1,000 riot police and several hundred protesters responded with a barrage of petrol bombs and rocks. They were driven back by police volleys of tear gas.

Some 3,000 activists massed on a Seoul university campus to launch the coalition, which it is thought could develop into a hardline reformist political party.

Among the coalition's leaders are Mr Kim Kwon-tae, winner of the Robert Kennedy human rights award in 1987 and Mr Lee Byung-yeon and Mr Chang Ki-pyo, who were released from jail under a presidential amnesty last year after being convicted for organising a 1986 street riot in the western city of Incheon.

Mr Lee told reporters on Saturday the alliance was formed to bolster a campaign for "democracy, the survival of the masses, the withdrawal of foreign troops and nuclear weapons (from South Korea) and unification of the Korean peninsula."

During the demonstration the radicals shouted "drive out Americans" and chanted slogans accusing the Government of colluding with business conglomerates to suppress labour activism. They also called for the repeal of what they said were repressive laws.

Anti-Americanism has become a strong theme to recent protests by radical students, who blame the US for the division of the Korean peninsula in 1945 and the installation of a series of repressive rulers in the South.

More than 40,000 US troops are stationed in South Korea under a mutual defence treaty, but US and South Korean military authorities refuse either to confirm or deny the existence of nuclear weapons in the South.

President Roh last month ordered a crackdown on violent anti-government and labour protests, saying they would harm national development.

Plessey rules out poison pill bid defence

By Hugo Dixon in London

FLESSEY, the embattled UK electronics group, has ruled out cross-shareholdings with friendly companies and any other poison pill defence - deals designed to make a company less appetising to its pursuers - in its fight to remain independent.

A Plessey director said at the weekend the company also accepted it would be difficult to persuade a white knight to out-bid GEC, of the UK, and Siemens, of West Germany, which have offered £1.7bn (about \$2bn) for the company.

Plessey is pressing on with its battle for independence despite the collapse last week of the consortium organised by its merchant bank which was trying to mount a £78m counter-bid for GEC.

Plessey is also pursuing its legal claim to buy out GEC's half-share of their telecommunications joint venture, GPT. The company is also believed to be considering other conventional strategies.

Plessey will be seeking to increase its share price above the level of GPT and Siemens and to persuade the Monopolies and Mergers Commission to block the bid.

The Plessey director ruled out poison pills on the grounds that "our shareholders would not vote for them." Under rule 21 of the City of London's Takeover Code, companies under siege must ask their shareholders to approve any contracts not in the ordinary course of business. This provision is designed to prevent managers from frustrating a takeover by doing deals that reduce their company's value.

The Plessey director said that arranging cross-shareholdings would come under rule 21, as would the signing of substantial joint ventures. There have been suggestions Plessey might need to make a white knight offer by putting large chunks of its business into joint ventures in much the same way GEC has.

However, GEC did not need shareholder approval for its plans because the counter-bid failed to materialise. Although the GEC/Siemens bid for Plessey technically lapsed after the Monopolies Commission started investigating it earlier this month, the main provisions of rule 21 still apply.

The Takeover Code would not, however, be an obstacle to a white knight trying to out-bid GEC or Siemens. The problem with this strategy is a poison pill contained in the agreement setting up GPT. This gives GEC the right to buy Plessey's half share of GPT should it be bought by any auditors if control of the company changes hands.

It is thought auditors would put a price of £600m to £700m on Plessey's share compared with the £200m-£300m it might receive by selling to the highest bidder. A white knight seeking to outbid GEC/Siemens would therefore have to overpay by about £300m.

"People might be prepared to overpay by a couple of hundred million pounds for GPT, but probably not for the rest of Plessey's business," the director said.

Japan takes to takeovers

THE TEX COLUMN

whereas the old opaque jobbing system is not. As before Big Bang, market-makers will now help each other out, but only on the basis of established relationships. A US broker seeking to execute a US sell order in ICI, but lacking a UK client base, can no longer rely on unloading the stock with Warburg or Smith New Court. Some would say it serves them right. Several of the smaller brokers - not only American - are perilously close to being fair-weather market-makers, automatically adjusting their prices to stay outside the touch and leaving it to the big houses to do the hard work of servicing all comers. But London faces constant competition as a financial centre, and if foreign houses cannot do business on the official stock exchange, they will elsewhere. In that case, this would cut the old guard, but surely no-one else.

The UK institutions, meanwhile, profess themselves broadly satisfied with the changes; if market-makers are shunned from their colleagues and have until next day to unwind positions, they will be the more ready to deal for clients in size. This may be short-sighted. The present overcapacity in the market means the institutions have the whip hand, but if all this leads to an old-style cartel, they will have only themselves to blame. They may also be faced with imperfections in futures and options markets; if, for instance, the prices of FT-SE stocks do not reflect large unpublished trades, the FT-SE future will to that extent be an unreliable instrument.

It can also be argued that delayed publication of large deals deprives small investors of material information. But this may be excessively purist. It might be asked how many private investors - or their brokers - now sit glued to the screen, poised to jump in behind the big trades; and for every would-be buyer who gains at present from the price being instantly depressed by a big sale, there is presumably a would-be seller who loses.

The real worry about the changes, though, is the split in which they are being undertaken. It was to be expected that the structure of the post-Big Bang market would need adjustment; after all, it replaced something which had taken a couple of centuries to evolve. The trouble is that instead of long-term strategy, London is opting for short-term panic reactions, and retrograde ones at that.

When it comes to reducing Japan's trade surplus, the exchange rate may be starting to look rather a dead issue. But Japan's mergers and acquisitions specialists know what the mighty yen can do, and are busy trying to persuade their clients that now is the time to do it. On the whole, Japanese industry still seems to think that growth by acquisition is a less honourable route. But someone must be listening to the M&A merchants; the Japanese bought more than five times as many foreign companies last year as in 1984, when the yen was worth half what it is now.

True, the ¥1.9 trillion (\$15bn) they are trying to persuade their clients that now is the time to do it. On the whole, Japanese industry still seems to think that growth by acquisition is a less honourable route. But someone must be listening to the M&A merchants; the Japanese bought more than five times as many foreign companies last year as in 1984, when the yen was worth half what it is now.

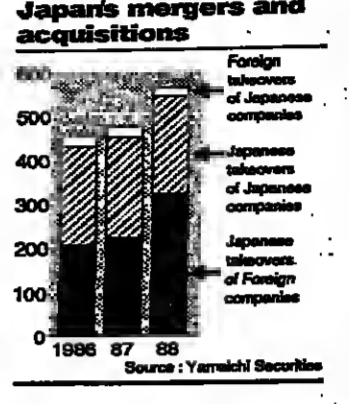
despite the size of the linguistic task involved.

The latter believes there is plenty of scope for domestic deal-making as well. The home-grown version of greenmail thrives on Japanese corporate soil already; and though the greenmailers' methods scarcely recommend them, they have at least made corporate shake-ups look a possibility. But though the number of domestic deals has risen sharply in recent years, it seems unlikely that investment bankers will be making fortunes in the domestic market any time soon. Hostile takeovers between Japanese companies look like remaining a corporate taboo for quite a long time yet; and when it comes to hostile foreigners, forget it.

UK market-making

The changes in the London Stock Exchange's rules on market-making being considered by the executive today look petty in themselves, but could have momentous consequences. The new rules - delayed reporting of big trades, and the removal of the obligation on market-makers to deal with each other - will discriminate in favour of big investors and against small investors, and could perhaps favour big investors against small. Perhaps above all, they represent an attempt to cope with the crisis in the securities industry by reverting to old-style club rules. If Big Bang was hasty and ill-considered, at least achieved its central object of forcing the London market into the global arena; the industry now risks reverting to parochial status.

In particular, the issue has elements of Anglo-American confrontation. Based as it is on NASDAQ, the New York system in its present form is intelligible to US brokers in London,



Computer standards row 'may be costly for makers and users'

By Alan Cane in London

SERIOUS disagreements in the computer industry on establishing worldwide standards are perpetuating an industry war which is likely to prove expensive for manufacturers and users, according to several large users.

The users include the European Commission, Lockheed Corporation and Royal Dutch/Shell, which are all members of a council set up last year to advise X/Open, a consortium of big manufacturers, on developing industry standards. The manufacturers include International Business Machines and American Telephone & Telegraph.

The users say the manufacturers, while paying lip-service to the ideals of X/Open, are in fact generating a backwash of anger and frustration which could have serious long-term consequences for all involved.

The row has forced computer makers and software vendors into a series of unlikely alliances. It centres around Unix, a software system (operating system) to control the operations of small and medium sized computers originally developed by AT&T.

Computer makers, software developers and customers agree that Unix is the best choice of an industry-wide or open standard operating system.

Its adoption could lead to big savings for computer users, who could run business software on any Unix machine. There would also be savings for software developers, who would be freed from having to write programmes for a particular manufacturer's proprietary system and thereby limiting their market. Unix is being increasingly specified as essential in government contracts worldwide.

Opposing camps - Unix International, led by AT&T, and the Open Software Foundation (OSF), guided by IBM - emerged last year, however, each claiming its version of Unix should become the world standard.

Talks aimed at resolving the dispute failed at the end of the year and both sides have indicated they see no point, for the moment, in further talks.

The collapse of the talks has enraged members of the X/Open advisory council. They see the use of two Unix standards as only continuing confusion and expense.

Mr Walter de Backer, director of informatics for the Commission of the European Communities (CEC) said: "The confusion that this split is causing among users will slow down progress for the market as a whole. We at the CEC are of the opinion that the extra costs of working with different open systems environments should be borne by the industry."

Mr Uwe Hartmann, a director of Daimler-Benz of West Germany added: "The rivalry between Unix International and the OSF is counterproductive to the initiative of open systems and is not in the user's interest."

The two sides, meanwhile, continue to develop their own versions of Unix and expect to market their first products this year. Mr Wim Roelans, general manager of the information group of Hewlett Packard, US minicomputer maker and one of the 60 or so OSF members, said: "At least, two versions of Unix is better than the 20 or so we have at present."



To Navigate in the Rough Waters of International Financing, Rely on Tokai Bank

The seas of international finance can get quite stormy. That's why you need an experienced navigator to determine the proper course for your financing and investments. With over 100 years of experience, 49 overseas offices, more than 1100 correspondent banks, and total assets of US\$ 222 billion, Tokai Bank is in a position to take command.

We don't rely on dead reckoning. As one of Japan's leading banks, our global information network provides a diverse range of accurate, up-to-the-minute banking services, innovative financial techniques, and an expert knowledge of the Japanese market. To make sure you steer the right course in international financing, come aboard with Tokai Bank.

Head Office: 21-24, Nishi-Shinjuku, Nishi-Shinjuku, Tokyo, Japan. Tel: 03-3291-1111. Telex: 228242
 International Banking Group: 21, Overseas 2 Centre, Colaba, Bombay, India. Tel: 022-661111. Telex: 228242

WORLD WEATHER

City	Temp	Wind	Cloud	City	Temp	Wind	Cloud
Abuja	27	10	0	London	10	10	0
Algeria	18	10	0	Madrid	12	10	0
Amman	18	10	0	Moscow	1	10	0
Antananarivo	22	10	0	Mumbai	28	10	0
Asmara	28	10	0	Nairobi	22	10	0
Bahia	28	10	0	Rangoon	28	10	0
Bangkok	28	10	0	Reykjavik	5	10	0
Beijing	1	10	0	Rome	12	10	0
Bombay	28	10	0	Sao Paulo	22	10	0
Buenos Aires	18	10	0	Seoul	1	10	0
Calcutta	28	10	0	Stockholm	5	10	0
Cairo	18	10	0	Taipei	22	10	0
Cardiff	10	10	0	Tokyo	12	10	0
Chengde	1	10	0	Winnipeg	-10	10	0
Chicago	10	10	0	Zurich	5	10	0
Colombo	28	10	0				
Dakar	28	10	0				
Dhaka	28	10	0				
Dublin	10	10	0				

Sakharov

Continued from Page 1

sian president is one of only two leading members of the Politburo forced to stand for election in their own republics. The other is Mr Vladimir Shcherbitsky, leader of the Ukraine Communist Party, and the last remaining representative of the Politburo of Mr Leonid Brezhnev to have survived. A suspicion remains that Mr Gorbachev might be prepared to see both men defeated as a dramatic proof of his democratisation process.

The nomination process has proved more chaotic than anticipated so far, with three sorts of disputes seeking nomination to the country's new super-parliament, the Congress of Deputies, on March 26.

Of the 2,350 members, 750 have to come from territorial constituencies of equal size, 150 divided equally between the 15 republics regardless of population, and 750 from "social organisations" like the Communist Party, the trade unions, and the Academy of Science.

The closer you look at City Offices the more you see... St Quintin 01-236 4040

DOUGLAS CONSTRUCTION GROUP

INSIDE

A big step for two US oil giants



Last week's \$4.15bn sale of Texaco's Canadian business to Exxon is a big step even for the two giant companies involved.

Keys to a conundrum

A shortage of information technology (IT) specialists leaves the UK "dangerously exposed" in international trade, according to the Confederation of British Industry.

World of wizard widgets

Concentric, the Birmingham-based engineering group, makes a better class of widget. At least that is the opinion of the company's chairman, Mr Tony Firth.

Canadian bonds come of age

The Canadian Dollar Eurobond market looks to have come of age. The astonishing pace of new issues this year has focused attention on an area which has long been identified with high coupon rates paid to borrowers.

Market Statistics

Table with 2 columns: Base lending rates, Euro market turnover, FTSE 100 index, etc.

Companies in this section

Table listing companies like Allied Dunbar, Anglo Irish Bank, Consolidated Gold, etc.

Devil take the hindmost

From apparently trivial beginnings, the London Stock Exchange is faced with a first class Anglo-American row.

Controversial stock exchange rule changes could put a number of London's smaller market-makers out of business.

£100,000 in value need not be published on the screen until the following day.

The new rules govern the way market-makers - dealers in shares as principals - go about their business.

To understand the future this has caused, one must grasp the power wielded by the established British market-makers.

Like many people in my generation, I formed my preconceptions of ordinary Americans from a mixture of Mark Twain and James Thurber.

(and wisdom) of Mr George Simke, previous confrontations. America's allies had a pretty good-humoured eight years.

President Bush's inaugural, proclaiming "the age of the proffered hand," may have been long on Mrs Peggy Noonan's rhetoric.

Anthony Harris in Washington explains the way in which the Bush inaugural signalled a change in Presidential direction

sure for change has come from the investing institutions, who have found themselves handicapped in doing big deals by the nervousness of market-makers.

A straw poll of leading London fund managers suggests that they have indeed been persuaded that the big market-makers will be more willing to take on stock under the new rules.

There are, after all, too many market-makers chasing too little business. My expectation is that the rule changes are likely to squeeze some people out of the market.

There are plenty of other potential disputes. The transfer of Dr Clayton Yutterm from the trade ambassador's office to the Department of Agriculture is a guarantee that the American assault on the EC farm policy will be sustained.

SYSTEMS COMPARED table comparing NASDAQ and SEAG systems.

equity market, and back that up with stories of unanswered telephones and piggy-back pricing. As one puts it: "We are getting fed up with smaller market-makers who are misusing their privileges."

From the British point of view, the proposed solution sounds very cosy. But for US brokers, used to the transparency of the Nasdaq screen system at home, it is not merely a tilting of the playing field in favour of the UK establishment, but a backward step in terms of the quality of the market.

It is not clear that the allies even have a proffered hand to grasp; the inaugural was light on foreign policy, and concerned mainly to offer a cautious hand to Moscow.

The long hearings with Mr Baker were more revealing, the strongest interest, apart from summary, was in Latin America. Mexico, in particular, is engraved on the heart of this very Texan Administration.

This has already caused an early breach with Europe. Mr Gerhard Stoltenberg, the West German Finance Minister, came to Washington a few days ago to get acquainted with the new regime.

The potential has become much stronger in the last two weeks, because the Libyan poison gas affair has been a diplomatic disaster which even in the serious American press is discussed as if it convicted all Europe (with a half-hearted saving clause for Mrs T) of ruthless venality.

Economics Notebook

Internal divisions impair G7

WILL IT be the G7, G8 or G-more-than-that which meets in Washington on February 27?

It was also a reminder that the world's leading seven industrial nations are often internally divided on issues of monetary policy and international economic policy co-operation.

Mr Gerhard Stoltenberg, West Germany's long-serving Finance Minister, should be used to such behaviour. His irritation last week - expressed in a notably lukewarm press statement about the Bundesbank's move - reflected the misfortune that he had given the impression in the US only the week before that German interest rates did not need to rise.

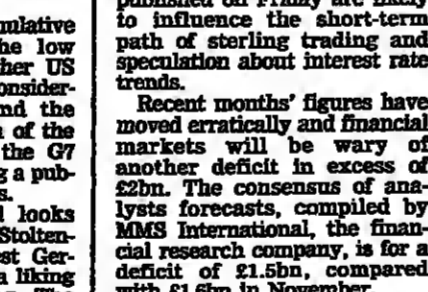
Mr Karl-Otto Pöhl over the dangers that recent currency developments could mean for the West German and world economies.

Mr Stoltenberg by contrast has a politician's concern for industry's profits and voters' jobs. No matter how much he may agree intellectually with Mr Pöhl's views, there is part of him that thinks a strong dollar is good for West German exports.

Without some debt communique drafting, a G7 meeting in February could seem to legitimise exchange rates, which, in the Bundesbank's view, take

THIS WEEK

UK Current Account Balance



Recent months' figures have moved erratically and financial markets will be wary of another deficit in excess of £2bn.

US preliminary figures for gross domestic product in the last three months of 1988 are published on Friday.

The advance report on durable goods for December, measuring orders in the pipeline, is released on Thursday.

Oil markets will be focused next week on a meeting in London on Thursday between Opec and non-Opec oil producers.

French trade figures for December are due on Thursday. Another deficit is expected, possibly adding to anxieties about the path of the trade balance.

Swiss Bank Corporation

Investment Banking

is pleased to announce the completion of its move to

Swiss Bank House, 1 High Timber Street, London EC4V 3SB

Telephone: 01-329 0329 Telex: 887434 sbco g Fax: 01-329 8700

- Syndicate - Fixed Income & Equity Linked - Primary Equity

Other divisions of our new London Office (including Swiss Bank Corporation Stockbroking and Swiss Bank Corporation London Branch) will be moving to Swiss Bank House during the first quarter of 1989.

Member of The International Stock Exchange and The Securities Association.



Peter Norman

INTERNATIONAL CAPITAL MARKETS AND COMPANIES

Montedison angers Wall St investors

By Alan Friedman in Milan

MR RAUL Gardini's Ferruzzi-Montedison group has angered some Wall Street investors by announcing a \$35 per share tender offer for the outstanding 27.4 per cent it does not own in Ausimont, the specialty chemicals concern.

The move goes against the wishes of a special committee of independent Ausimont directors which says the offer is inadequate.

Ausimont's quote on the New York Stock Exchange rose to close on Friday at \$35.75 from an opening on Tuesday of \$34.

The Montedison offer for 8m Ausimont ordinary shares, which would cost \$280m, follows months of controversy among Ausimont directors.

The offer has angered the independent US and Dutch directors who believe the break-up value of the company, according to a study by Morgan Stanley for Ausimont, is significantly higher than \$35 per share.

Montedison said at the weekend it considered the offer fair in a statement it said it was going ahead with the offer notwithstanding the views of

the special committee [of outside directors].

Morgan Stanley refused to reveal the break-up value. It said it saw no conflict of interest in having done the valuation for Ausimont last spring and now handling the tender offer for Montedison.

Mr Jim Harmon, an independent Ausimont director and executive at Wertheim-Schroder in New York, said several institutional investors in Ausimont were enraged by the Montedison offer.

"I am terribly saddened and dismayed that Mr Gardini has decided to act despite our recommendation that the \$35 offer is inadequate and clearly not in the best interests of minority shareholders," Mr Harmon resigned last week from the boards of two other Montedison subsidiaries: Himont and Erbement.

Because Ausimont is a Dutch-registered company, Montedison needs to lift its stake from 72.6 per cent to 95 per cent before it can bring its own action in Dutch courts to "freeze out" remaining Ausimont shareholders and force them to sell out.

El Pais buys stake in rival

By Peter Bruce in Madrid

A LOOMING Spanish business newspaper battle took a dramatic turn at the weekend when El Pais, the large Madrid daily paper, announced it is to take a 33 per cent stake in Estructura, publisher of Cinco Dias.

The unspecified investment will come as a timely boost to Cinco Dias, which also counts among its shareholders Expansion, the French business daily, and Dow Jones, pub-

lisher of the Wall Street Journal.

Pearson, publisher of the Financial Times, nearly took a stake in Cinco Dias last year, before buying a 35 per cent in its Spanish rival, Expansion.

Two new business daily newspapers are to be launched on to the small and crowded Spanish market in the next few months by the publishing groups Grupo 16 and Grupo Zeta.

Dutch insurer in Montreal deal

NATIONALE-Nederlanden, the largest general insurer in the Netherlands, is expanding in Canada by acquiring Groupe Commerce, a Montreal property and casualty company with nearly 10 per cent of the Quebec market. The price was not disclosed, writes Robert Gibbens in Montreal.

The Dutch group is buying

the 65 per cent interest in Groupe Commerce held by the Saint Germain and Benoit families and the 35 per cent interest held by Union des Assurances de Paris.

Commerce had total premium income of C\$263m (US\$222m) in 1987 and assets at year-end in 1987 were more than C\$400m.

Wärtsilä pulls out of shipyard merger plan

By Olli Virtanen in Helsinki

WARTSILÄ, the Finnish metal and engineering group, will not participate in the planned merger of all the country's shipbuilding operations because it regards the state's proposed participation as insufficient.

Finland's three shipbuilding companies - Wärtsilä Marine Industries, of which Wärtsilä owns 70 per cent and Valmet 30 per cent, Rauma-Repola and Hollming - planned to merge their shipyards in a new company, provided the Government participated with an equity stake of about 20 per cent.

The Ministry of Trade and Industry rejected the proposal for a shareholding and also refused to give the new company additional guarantees. However, the industry promised to increase subsidies, now amounting to less than 10 per cent, to between 10 and 15 per cent of an order's value.

Strong demand boosts Motorola

By Peter Bruce in Madrid

MOTOROLA, the US electronics group, boosted fourth-quarter income following strong demand for communications equipment, cellular telephones and semiconductor products, Reuter reports.

Earnings climbed to \$124m or 96 cents a share from \$102m or 79 cents a year ago on sales which advanced to \$2.19bn from \$1.86bn. At year-end, net income jumped to \$445m or \$3.43 against \$308m or \$2.39 on sales of \$8.23bn, compared with \$6.73bn.

Koor hearing delay

AN ISRAELI court yesterday postponed until February 12 the hearing of a suit by New York-based Bankers Trust to break up Koor Industries, Israel's largest industrial concern, Reuter reports.

The Tel Aviv district court judge granted the delay after attorneys from both sides said their clients were working on a recovery plan.

Texaco Canada sale oils Exxon expansion

James Buchan and David Owen on effects of a \$4.15bn deal for two industry leaders

LAST week's \$4.15bn sale of Texaco's Canadian business to Exxon is a massive step, even for the two huge companies involved.

For Texaco, the third largest US oil company, the transaction is the climax of a year-long corporate reorganisation designed to stave off a takeover.

For Exxon, the largest company in the US industry, the deal marks a return to a policy of expansion after three years of consolidation.

The business being sold, after a lengthy and well-hatched auction, is Texaco Canada, a medium-sized producer with 38bn barrels of crude oil in the ground, nearly 2,000bn cu ft of gas, two refineries and 1,800 petrol stations.

Last year, the company reported net income of C\$320m (US\$271m) on revenues of C\$2.7bn. But Texaco itself, with 72 per cent control, says Canadian law allows it no access to its subsidiary's cash flow, only to a relatively modest stream of dividends.

This is one reason why dissenting Texaco shareholders, led by Mr Carol Ichan, a New York investor, have been badgering Texaco to pull capital out of Texaco Canada and repay it to shareholders. Mr Ichan, who owns 16.6 per cent of Texaco, tried to find a buyer for Texaco Canada during an unsuccessful bid for control of its parent last summer.

Texaco executives say that by waiting for oil prices to improve and then staging a full auction, Mr James Kinnear, the company's chief executive,

has gained a much better price for the business than the \$3bn or so Mr Ichan was looking for last summer. Wall Street oil analysts agree, but say Mr Kinnear is still faced with a dilemma.

Since mid-summer last year, Mr Kinnear has built a mountain of about \$7bn in cash from selling low-return assets. These comprise:

• \$1.2bn from the sale of the company's lacklustre West German subsidiary,

• \$1.8bn from the sale to Saudi Arabia of a half share in Texaco's main refining and marketing operation in the eastern US,

• \$3.24bn for its shares in Texaco Canada,

• \$573m in special dividends from the Canadian company as well as continued control of its most promising exploration prospects.

What Mr Kinnear does with this money could decide the fate of his harassed company. On Friday, he said he would distribute \$1.7bn of it to shareholders by buying back shares, or by some other means. He will use the remainder to reduce Texaco's debt, restructure its balance sheet and invest in the oil and gas business.

But Mr Ichan has repeatedly pressed for more money to be paid back to shareholders, arguing that Texaco cannot invest it profitably at a time of weak oil prices. He has threatened to relaunch his bid for control if he is not satisfied with Mr Kinnear's restructuring.

Wall Street analysts say the



James Kinnear, still facing a dilemma

Instead, it has spent more than \$9bn since 1985 in buying back its own stock and Exxon's shareholders have enjoyed as good a return as any in the industry.

Exxon was willing to go to town on Texaco Canada, overbidding Royal Dutch/Shell as well as Mr Alan Bond of Australia, because of the potential benefits to its Canadian operation, the majority-owned Imperial Oil.

Although the deal, which will consolidate Imperial's position as Canada's largest oil company, is not as big as last year's C\$5.5bn purchase of troubled Dome Petroleum by Amoco Canada, its short-term implications for the domestic energy sector are perhaps greater.

This is because of the hefty portion of Texaco Canada's assets accounted for by downstream facilities.

The purchase will initially turn Imperial - already the largest Canadian-based energy company - into a C\$10bn corporation (based on 1987 revenues), nearly twice as big as government-owned PetroCanada, its nearest domestic rival.

All told, the company will boast reserves totalling 2.3bn barrels of crude oil and 6,400bn cu ft of natural gas, refining capacity of 532,000 barrels per day (b/d) and control more than 36 per cent of the Canadian petroleum market.

Texaco Canada's 2,000bn cu ft of natural gas, much of which will not be marketable until well into the next decade, and its up-to-date Nanticoke, Ontario, refinery are widely

regarded as the jewels in the crown.

The Nanticoke plant is prized because it can produce half its hydrocarbon feedstock as lead-free petrol. The Government is committed to phasing out leaded fuel by December next year.

The takeover is, however, subject to approval by Investment Canada and the Bureau of Competition Policy (BCP). Indeed, Mr Calvin Goldman, BCP's head, has warned that those responsible for last week's rush of Canadian mergers would be "taking a chance" were they to close deals before a full investigation.

Texaco expects to complete the sale by March 10 and financial penalties will accrue to Imperial if there is a delay.

Imperial has already undertaken to make certain unidentified disposals in a bid to placate the regulators.

These divestments are thought most likely to comprise certain downstream assets, with some of the company's retail outlets and sales terminals at the top of several analysts' lists.

There may also be concern about excessive concentration in the refining sector. The deal leaves only three pan-Canadian refiners and a handful of regional players. Since 1984, closures have scythed domestic refining capacity by more than 1m b/d.

However, the keen competition and relatively high price paid for the Texaco assets has prompted speculation that the Government may soon bring PetroCanada to market.

European exchanges co-ordinate response to 1992

By Katherine Campbell in Interlaken

FOUR European futures and options exchanges have agreed to co-operate in lobbying officials in Brussels over the lifting of European Community barriers to capital flow in 1992.

The four exchanges - the London International Financial Futures Exchange, the London Traded Options Market, the European Options Exchange and France's Matif - have called their group Ecoflex, the European Commission Co-ordinating Committee of Options and Futures Exchanges. The committee, which aims

to ensure that derivatives receive attention in the financial services directives now being mapped out, meets in a few weeks to finalise its constitution. It will then recruit as members all EC derivatives exchanges.

Although officials in some European markets have recognised the importance of closer co-operation in Europe, Ecoflex represents one of the few concrete steps to have been taken so far.

Mr David Burton, chairman of Life, told the Swiss Options

and Financial Futures Investment Conference in Interlaken, Switzerland, last week that European futures and options exchanges would risk losing the initiative to American and Japanese competitors if they failed to co-operate with each other in regulatory and other matters.

However, co-operation on important technical issues was particularly sensitive. While exchanges often advised extensively and even shared in building embryonic ventures, once the market was estab-

lished, working together became more problematic.

There were battles to be fought over systems, for example. The trading system which had developed, which combined elements of both, open outcry and automated trading, "could bring separate European exchanges together," Mr Burton said.

Others think their systems are marketable too.

Mr Theodore Westertep, president of the European Options Exchange, recently signed a letter of intent to buy

a share in the Swedish Options and Futures Exchange, a deal that would include the purchase of its integrated trading system, STS.

Mr Westertep would then introduce STS to the new Rotterdam oil exchange, with the French options exchange Monop another taker.

In a separate move, the EOE is developing a broad stock index based on the price of some 200 companies across the EC, weighted according to both market capitalisation and gross-national product.

This advertisement appears as a matter of record only.



European Investment Bank

Issue of

£100,000,000

9½ per cent. Loan Stock 2009

Issue Price 95.586 per cent.

placed by

Barclays de Zoete Wedd Limited

November, 1988

The Cresvale Group is pleased to announce

The opening of its Zurich office

Managing Director

Mr Andy Herbert

Executive Director

Mr Urs Mettler

Chief Operating Officer

Mr Karl Huwyler

Cresvale (Switzerland) Ltd.
Crattinstrasse 12
8023 Zurich
Telephone
01/212 12 12
Telex
815 248
Fax
01/211 06 63



CRESVALE
(SWITZERLAND) LTD

The Cresvale Group is pleased to announce

The opening of its Tokyo Branch office

Managing Director and Branch Manager

Mr Akira Setogawa

Deputy Branch Manager

Mr James Parsons

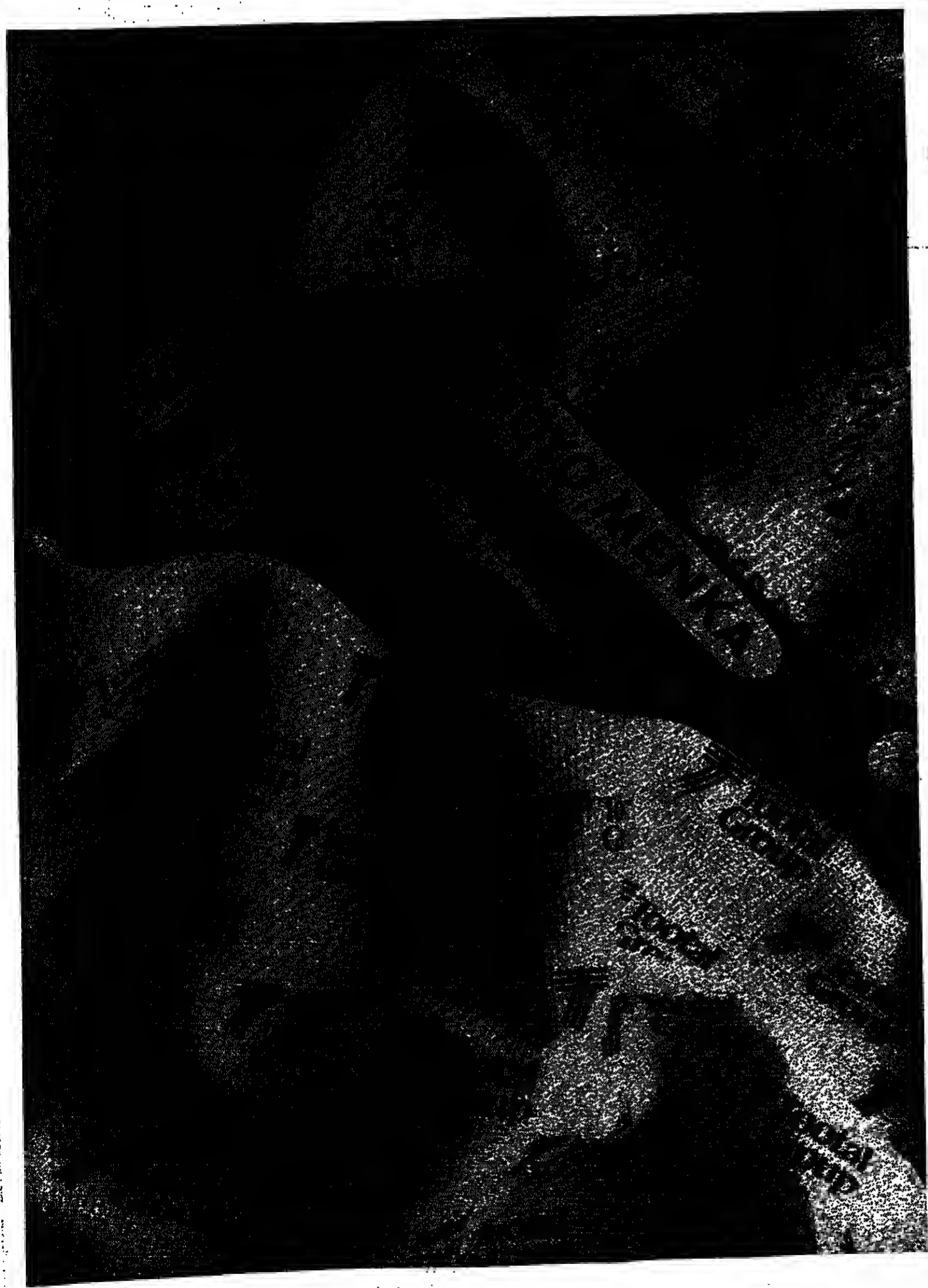
Cresvale International Limited
Tokyo Branch
Hiei Kudan Kita Building
4-1-3, Kudan Kita
Chiyoda-ku
Tokyo 102
Japan
Telephone
03-222-6911
Telex
2425355 CILTYO
Fax
03-222-6970



CRESVALE
INTERNATIONAL LTD

The hi-tech dye tech that brings fast colours to Europe

The fastest high quality fabric dyeing and distribution service in Europe will be provided by Dundee Textiles Ltd when its new fully computerised £16 million plant comes on stream in 1990. A joint venture by Tootal Group and Japanese textile groups Kurabo and Toyo Menka, the Dundee dye plant will incorporate the most sophisticated – and already tried and tested – Japanese technology. Providing an unrivalled combination of quality and fast response. Exemplifying Tootal Group's successful drive to win leadership in world markets through the strategic development of its global marketing, distribution and sourcing skills. An international marketing-led group with sales of over £500 million, Tootal operates in over 20 countries and markets its products in over 60 countries worldwide.



WINNING LEADERSHIP IN WORLD MARKETS
 If you would like more information about Tootal Group write to: Audrey Lloyd-Kitchen, Director of Corporate Affairs, Tootal Group plc, Tootal House, 19/21 Spring Gardens, Manchester M60 2TL

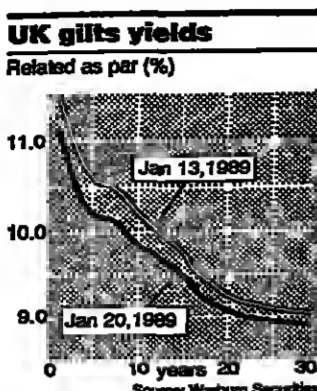
ion
 leaders
 1992
 leased
 pleased
 office

INTERNATIONAL CAPITAL MARKETS

UK GILTS

Analysts' trend-spotting leaves unpleasant taste in the mouth

THE GILT-EDGED securities market thought it saw a glimmer of light at the end of the tunnel last Thursday, but by Friday it could not quite make up its mind as to whether it was the headlight of a train or the hint of blue skies beyond.



UK gilt yields Related as per (%)

A similar pattern was observed last week. The market had developed a rather nasty taste in its mouth after the release of the Bank of England's December monetary numbers. Bank and building society lending was well in advance of expectations and unadjusted M0, at an annual rate of 8.5 per cent, added to uncertainty.

A slowing in the rate of output growth. The Central Statistical Office's index of manufacturing output has been flat since the third quarter.

This should not be surprising given the slightly reduced pressure from the consumer and the squeeze being exerted by the exchange rate. The Treasury's Autumn Statement envisaged manufacturing output slowing to year-on-year growth of 4 1/2 per cent this year compared with 1988.

By midday on Friday, however, the market had developed a rather nasty taste in its mouth after the release of the Bank of England's December monetary numbers.

But what the market would not want to see is a stagnation in output and the attendant worries that this might hold for the current account of the balance of payments.

Economic data on the UK continued to tell a mixed story, but the balance has tilted in favour of a slowing in the growth of consumer spending.

Analysts appear to offer is that a relative shift in the share of national income from profits to wages can be accommodated because of the buoyancy of the former and that the Government's high exchange rate policy will prevent it from feeding through to recorded inflation.

Whether the market is as sanguine in the medium term is debatable. Few can see long-dated yields breaking out of the 9 per cent to 9.5 per cent

Similarly, there are signs of

US MONEY AND CREDIT

Foreign exchange dealers regain initiative

LAST WEEK was the week when that inimitable breed, foreign exchange dealers, took over as they often have in the past.

However, the dollar has defied all expectations and in the short term, there are several reasons why.

Firstly, there is a risk the dollar will significantly erode US exporting power and boost imports when the Japanese and German trade surpluses appear to be getting bigger.

Secondly, West Germany in particular has made clear it has its own inflation problems and does not want the D-Mark to be nearly as weak as it now is.

Britain and Japan, too, are concerned about inflationary pressures, although Japan has remained studiously on the sidelines during the latest bout of dollar strength and has not taken part in the intervention.

At the beginning of the year, it seemed only logical to assume the dollar would come under downward pressure this year. Every factor was against the currency.

The West German Lombard rate has risen twice in as many months.

Last week, the rise was coordinated with policy tightening by other European central banks and this, coupled with repeated and concerted intervention, apparently appeared to have had a dampening effect on dollar demand.

Weeks of speculation ended late last week when the G7 finally announced they would meet in Washington on February 3.

The continued desire for currency stability will, no doubt, be back at the centre of the agenda.

When it does, the dollar should naturally begin to weaken to reflect slower growth and an easing by the Federal Reserve.

No currency can remain wild, the argument goes, when a country is running a budget deficit measured in the hundreds of billions, a trade deficit running at between \$10bn and \$12bn a month and a financial system which has every sign of being chronically

While there may be a certain usefulness about a firm dollar, it is not in the interests of any member of the G7, including the US, to allow foreign

exchange dealers to run rampant.

Mr Greenspan's Fed is clearly being assiduously vigilant about inflation - one reason for the confidence in the foreign exchange and bond markets.

Simon Holberton

US MONEY MARKET RATES (%)

Table with columns: Instrument, Last Friday, 1 week ago, 4 wks ago, 12-month High, 12-month Low. Rows include Fed Funds weekly average, 3-month Treasury bill, 6-month Treasury bill, 9-month Treasury bill, 12-month Treasury bill, 30-day Commercial Paper, 90-day Commercial Paper.

US BOND PRICES AND YIELDS (%)

Table with columns: Instrument, Last Friday, Change on Wk, Yield, 1 week ago, 4 wks ago. Rows include 3-month Treasury, 6-month Treasury, 9-month Treasury, 12-month Treasury, 30-year Treasury, 30-year Commercial Paper.

NRI TOKYO BOND INDEX

Table with columns: Instrument, Average, Last, 12 wks ago, 24 wks ago. Rows include Overall, Government Bonds, Municipal Bonds, Corporate Bonds, Bank Deposits, Real Estate, Foreign Bonds, Government 10-year.

FT/AIBD INTERNATIONAL BOND SERVICE

Large table listing international bond services with columns for Country, Instrument, Price, Yield, etc. Includes sections for US, UK, Germany, France, Italy, Japan, etc.

Baring, Wilson & Watford are pleased to announce that they are now market makers in the following list of Debentures and Loan Stocks.

- National Westminster 12 1/2% Sub. Loan Stock 2004
Midland 14% Sub. Loan Stock 2002/2007
Standard & Chartered 12 1/2% Sub. Loan Stock 2002/2007
Barclays 16% Sub. Loan Stock 2002/2007
TS.B. 10 1/2% Sub. Loan Stock 2008
Barclays 12% Sub. Loan Stock 2010
...
Tesco 4% Deep Discount Loan Stock 2006
Pearson 13 1/2% Unsecured Loan Stock 2007
...
Witney Mann 12 1/2% Deb. 2008
Allied Lyons PLC 11 1/2% Deb. 2009
Seagraves 12 1/2% Deb. 2012

For further details, please contact B. W. Grundy (Sales) 01-283 8833 D. C. Rhodes (Trading)
Baring, Wilson & Watford, 8 Bishopsgate, London EC2N 4AE

Vertical text on the right edge of the page, possibly from an adjacent page or a margin note.

INTERNATIONAL CAPITAL MARKETS

EUROCREDITS

UK mortgage lender leaps loan hurdle

WHEN National Home Loans, the UK mortgage lender, cast about for ways to diversify its short-term borrowings, it ran up against several obstacles. For one thing, the company wished to take some of its mortgages off balance sheet, so that an asset-backed structure seemed best. But the company has already issued several asset-backed floating-rate notes and it wished to avoid saturating the market.

In addition, NHL wanted to expand US borrowings where rates on commercial paper are lower than in the UK. But it does not have a rating from any agency and CP is virtually impossible to issue in the US without one. Besides, ultimately NHL needs sterling, not dollars.

However, the company, working with Financial Security Assurance, a AAA-rated financial guarantee company and S.G. Warburg, devised a novel structure that will allow it to get around the obstacles and raise funds at a rate roughly comparable to that on sterling FRNs.

NHL is raising about \$400m in US commercial paper via two special-purpose US companies, FSA Beta and FSA Delta, which carry the AAA rating of FSA. These in turn swap the funds into sterling, lending them on to two UK companies, NHL-1 and NHL-2. The assets of these two companies consist of UK home mortgages purchased from NHL and thus removed from its balance sheet.

NHL-1 and NHL-2 pay for the mortgages with cash flows of interest and principal from the portfolios they hold.

EUROMARKET TURNOVER (\$bn)

Primary Market	Sec	Fin	Other
US\$	254.5	38.0	0.9
Yen	1,582.2	1.0	267.2
Other	2,782.1	262.3	180.4
Prv	3,230.9	230.0	203.3

Secondary Market	Sec	Fin	Other
US\$	8,811.1	1,241.8	4,236.9
Yen	5,897.7	749.9	3,022.1
Other	17,022.8	262.3	1,822.4
Prv	14,045.6	262.3	1,822.4

Week to January 20, 1989. Source: ABN

INTERNATIONAL BONDS

New-year surge keeps spotlight on Canadian \$ sector

CANADIAN dollar Eurobonds have long been identified primarily with the high coupons paid by borrowers. The astonishing pace of new issues in the first weeks of this year has focused attention on a market sector that many believe has come of age.

Some C\$1.2bn of paper has been issued this month - representing 20 per cent of the total for all of 1988, when C\$16.2bn was brought to the market.

As the chart shows, the sector's share of new issue volume increased significantly last year, to the extent that many players felt 1988 was a freak.

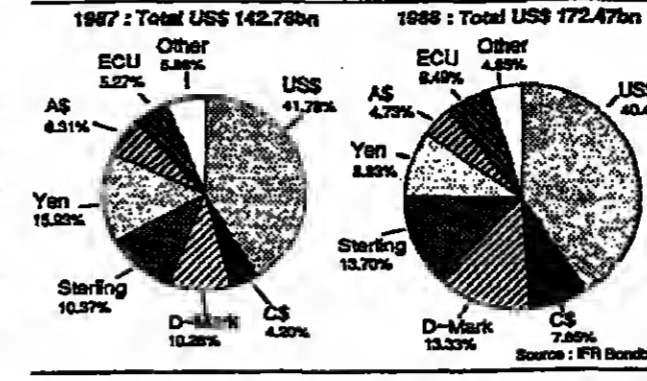
Lead managers have consequently been amazed by 1989's heavy activity and expect an inevitable slowdown while the paper is absorbed. However, talk of a glut of unsold bonds overbidding the market has to be put into context.

Mr Roger Pace, of issuing house Scotia McLeod, says: "There is some indignation, but given the circumstances that's hardly surprising. Really it's unbelievable that so much paper has gone so well."

A good measure of the sector's strength is that even the few issues judged as tightly priced at launch are trading on or within fees.

For example, an issue of C\$100m two-year bonds by BNL Overseas Finance had a slow reception, due to the unfamiliarity of the borrower's name and the timing of a similar deal for the European Community, but is trading at a discount just equivalent to fees.

Eurobond issues by currency



but was trading on Friday at nearer 78 basis points.

The Province of Alberta 10% per cent bonds of 1994, seen as a benchmark by traders, were launched at a spread of around 27 over governments which had widened to 32 by Friday.

The increasing role of professional spread traders in the Canadian sector is not to be underestimated.

Issuing houses use a rule of thumb that the typical Euro-Canadian bond trades eight times before it is finally placed.

Much of that turnover is accounted for by traders who buy the Eurobonds, sell government bonds to lock in a spread and wait for the tighter

market tracks the US Treasury market closely and has benefited from its recent strength, stimulated by the upturn in the fortunes of the US dollar. Also important has been the rise of the Canadian dollar against European currencies, notably the D-Mark and the Swiss franc.

The benchmark 10% per cent February 1994 Canadian government issue yielded 10.37 per cent on a semi-annual basis on January 10 and now yields 10.21 per cent.

Like the bond market, the Canadian dollar generally tracks its US counterpart, but this year it has out-performed it, strengthened by an economy judged fundamentally sound.

The combination of a tight monetary policy, reasonable growth prospects and the passage of the Free Trade bill makes an attractive picture, although economists sound a cautionary note over Canada's budget deficit.

The federal budget, likely to be announced in late February, will be an important indicator - "make or break time for the Canadian market," according to Midland Montagu Research.

On the bank of the Canadian dollar's strength, sophisticated Continental investors have indulged in some profit-taking.

Andrew Freeman

NEW INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Book runner	Offer yield %	Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Book runner	Offer yield %
US DOLLARS															
Suntomo Forestry	150	1993	4	4 1/2	100	Daiwa Europe	4.375	Dresdner Stt-East Asia	50	1992	3	14 1/2	101 1/2	Dresdner Bank	13.432
Suntomo Chemical	400	1993	4	4 1/2	100	Nomura Int.	4.125	D-MARKS							
Daiwa Paper Ind.	100	1993	4	4 1/2	100	Mitsui Secs. (Europe)	4.375	Spar Int. Fin.	60	1996	7	0 1/2	100	DG Bank	6.900
Nippon Paper Ind.	100	1996	10	9 1/2	101 1/2	J.P. Morgan Secs.	5.388	Island, Republic of	150	1999	10	8 1/2	101	WestLB	6.488
Nippon Steel	150	1995	6	9 1/2	101 1/2	Goldman Sachs Int.	2.451	SWISS FRANCS							
Mitsui & Co.	100	1993	4	(4 1/2)	100	Nomura Int.	*	Yuzumi Denki Co.	60	1993	-	1/2	100	Credit Suisse	6.500
Hanwa Co.	700	1993	4	(4 1/2)	100	Yamaichi Int. (Eur)	*	Kanagawa Chuo Kotsu	40	1994	-	6	100 1/2	IBJ (Switz)	4.828
Mitsubishi Oil Co.	250	1993	4	(4 1/2)	100	Nikko Secs (Europe)	*	Poly Pack Int. Fin.	100	1998	-	8 1/2	100	S.G. Warburg Sedtic	6.250
Hankyu Dept. Stores	200	1993	4	(4 1/2)	100	Daiwa Europe	*	Thomas-Brandhoff	220	1995	-	2 1/2	100	US\$	2,500
Nakayama Steel Works	150	1993	4	(4 1/2)	100	Nomura Int.	*	Japan Radio Co.	100	1993	-	(1 1/2)	100	Credit Suisse	4
Ford Motor Credit	200	1996	7	9 1/2	101.425	Nomura Int.	9.339	Sogo Denki Co.	60	1994	-	6	100 1/2	Handelsbank NWWest	4.895
Swedish Export Credit	150	1999	1	9 1/2	100.25	Yamaichi Int. (Eur)	8.577	Art Moving Center	10	1994	-	5	100 1/2	Fuji Bank (Switz)	4.888
Electrolux	100	1996	7	10	101 1/2	CSFS	9.845	STERLING							
Samsung Electronics	40	1996	4	(5 1/2)	100	Daiwa Europe	*	EB (d)	100	1997	8	10	97 1/2	Samuel Montagu	10.404
OKOBANK	100	1992	3	9 1/2	101 1/2	IBJ Int.	8.081	FRENCH FRANCS							
CANADIAN DOLLARS															
Swedish Export Cr.(d)	150	1990	1	12	101 1/2	Bankers Trust Int.	10.345	Parnod Ricard	500	1994	6	8 1/2	101 1/2	Societe Generale	8.433
Houssels Finance	75	1994	5	11 1/2	101 1/2	US\$ (Secs)	10.746	ECU							
Nippon Tel. & Tel.	200	1996	7	10 1/2	101 1/2	Bge Paribas Cap.Mkts	10.585	EEC	25	1991	2 1/2	8	100 1/2	Cle Monneguque de Bge	7.738
Royal Tel Mortgage(d)	100	1994	5	10 1/2	101 1/2	Shearson L'hman Hutton	10.441	YEN							
EEC	80	1991	2	11 1/2	101.55	Chase Inv. Bank	10.353	Soc. Chateaubriand D'Ass.	100n	1994	5	7	111 1/2	Mitsui Finance	4.389
Banco Finance (N.V.)	75	1991	2	11 1/2	101 1/2	Herrill Lynch	10.628	<small>*Not yet placed. **Private placement. With equity warrants. Floating rate notes. **Convertible. **Final terms. **Currency-linked. Redemption in either C\$ or US\$ at issuer's option. **Backed by C\$ bills of maturity. **Warrant exercise period 4 years. **Forfeited with issue launched in October 1988. Note: Yields are calculated on ABN basis.</small>							
WestLB Int.(Lux'bourg)	100	1996	7	0	80.47	WestLB	10.261	AUSTRALIAN DOLLARS							
WESTPAC BANKING CORP.															
Toronto-Dominion Bank	50	1992	3	14 1/2	101 1/2	Westpac Banking Corp.	14.700	FIN. CO. SIN AUSTRALIA							
Fin. Co. Sin Australia	50	1991	2	15 1/2	101.70	CCF	14.708	ROYAL TRUST CORP.							
Royal Trust Corp.	75	1992	3	14 1/2	101 1/2	Algemene Bk Nederland	14.226	ICI							
ICI	100	1992	3	15	101 1/2	J.P. Morgan Secs.	14.404								

Norma Cohen

This announcement appears as a matter of record only. JANUARY 1989

U.S. \$75,000,000

Revolving Credit Facility

Arranger
Credit Suisse First Boston Limited

Co-Lead Managers
Credit Suisse **Banco di Roma**
Creditanstalt-Bankverein **The Industrial Bank of Japan, Limited**
Kredietbank NV

Co-Managers
Cassa di Risparmio delle Provincie Lombarde - CARIPLO
Commerzbank Aktiengesellschaft **Credito Italiano**

Conduit Bank
Banco di Roma

Agent Bank
Credit Suisse First Boston Limited

This announcement appears as a matter of record only. JANUARY 1989

U.S. \$240,000,000

Interhome Energy Inc.

Note Issuance Facility

Arranger
Credit Suisse First Boston Limited

Lead Managers
Bank of America Canada **The Bank of Nova Scotia**
Canadian Imperial Bank of Commerce **Credit Suisse Canada**
The First National Bank of Chicago (Canada)

Managers
Morgan Bank of Canada **The Toronto-Dominion Bank**

Participants
Citibank Canada **The Royal Bank of Canada Group**

Facility Agent
Credit Suisse First Boston Limited

Issuing and Paying Agent
The First National Bank of Chicago

UK COMPANY NEWS

First Technology misled by the Takeover Panel

By Andrew Hill

FIRST TECHNOLOGY, the security and safety systems manufacturer, inadvertently broke the Takeover Code in the build-up to launching Friday's hostile bid for Ricardo Group...

The panel had to ask First Technology to tear up irrevocable acceptances representing 13 per cent of Ricardo's shares...

ted under the code. All the shareholders concerned - including UEL, the high technology engineering and electronics group, which owns 4.9 per cent of Ricardo...

The hitch enabled the Ricardo camp to speak to UEL and CEI, in an attempt to find out why they had committed themselves to the unwelcome offer...

were under no legal obligation to sign the new irrevocable undertakings. The substantial acquisition rules of the Takeover Code prevent investors buying more than 15 per cent of a target before an offer is announced...

First Technology, which increased its 4.9 per cent stake in Ricardo to 14.9 per cent in the few days before the bid, was wrongly advised by the panel that receiving irrevocable acceptances before announcing the offer would not breach the code.

Parkdale plans £12m development

By Andrew Hill

PARKDALE HOLDINGS, the property and leisure group headed by Sir Peter Parker, former chairman of British Rail, has bought part of the Rushmore Estate, near Salisbury...

Last February, Parkdale bought Clifford Barnett, a leisure development specialist,

and in a similar deal, announced in September, acquired most of the Archerfield Estate, next to Muirfield golf course.

The Rushmore development, to be carried out with a joint venture partner, will include a 100-bedroom country club, an 18-hole championship-standard golf course and a leisure centre.

Lord Young expected to get Minorco report today

THE MONOPOLIES and Mergers Commission is today expected to deliver its report on Minorco's £2.9bn hostile bid for Consolidated Gold Fields...

He has no statutory duty to publish the MMC report on the bid by the South African-controlled investment company within a fixed time limit...

of Lords on Friday - to hold up publication until he has seen the results of the inquiry by his department's inspectors into possible insider trading in Gold Fields' shares...

Samuel Heath

Samuel Heath & Sons, the giftware and hardware manufacturer, raised pre-tax profits by £19,000 to £265,000 for the six months to end-September...

Crown juggles radio stakes

By Fiona Thompson

CROWN Communications, the US-listed firm, video and television production specialist, has made a number of disposals and acquisitions of commercial radio stakes...

It has sold 642,240 shares in Manchester's Piccadilly Radio for £1.42m, cutting its stake in the non-voting shares by one third to 18.06 per cent...

Radio in Wolverhampton.

The shareholding in Radio Mercury (Beijing) has been increased to 29.9 per cent and it has taken up its full entitlement under rights issues of Southern Sound (Brighton) and Radio Forth (Edinburgh)...

Crown a 22.1 per cent stake.

Total cost of the purchases was £1.9m. Mr Brian Wallis, finance director, said all the stakes were trade investments. Mr Christopher Chataway, chairman, said in respect of Piccadilly and Beacon offers considered attractive were accepted...

AB Foods has 2% of UB

By Andrew Hill

SIR HECTOR LAING confirmed yesterday that Associated British Foods, the milling and baking company, has a 2.1 per cent stake in United Biscuits, the snack foods and restaurant group...

The stake, worth about £27m at current market prices, has been held since August through nominees, but Sir Hector said he thought ABF, which is headed by Mr Gary Weston, regarded it as a trade investment.

UB's share price has been buoyant since the beginning of

the new year, and there has been speculation about a possible bid from Jacobs Suchard, the Swiss confectionery group.

ABF also holds a 24 per cent stake in S & W Berisford, the sugar producer and commodities dealer, following a bid for the company which was abandoned after the stock market crash in October 1987...

NOT LONG AFTER W. G. GRACE WAS OPENING IN MELBOURNE, AUSTRALIAN MUTUAL PROVIDENT WAS OPENING IN LONDON.



When the great Doctor Grace led Lord Sheffield's XI out at Melbourne in 1892, Australian Mutual Provident was already the largest life insurance office on its home ground, and just 18 years later would open its first London branch. AMP is still the leading Australian life office, with over 30% of life insurance and retirement funds. Our £12bn investments are broadly spread over shares, government and fixed-interest securities, property, energy and natural resources...

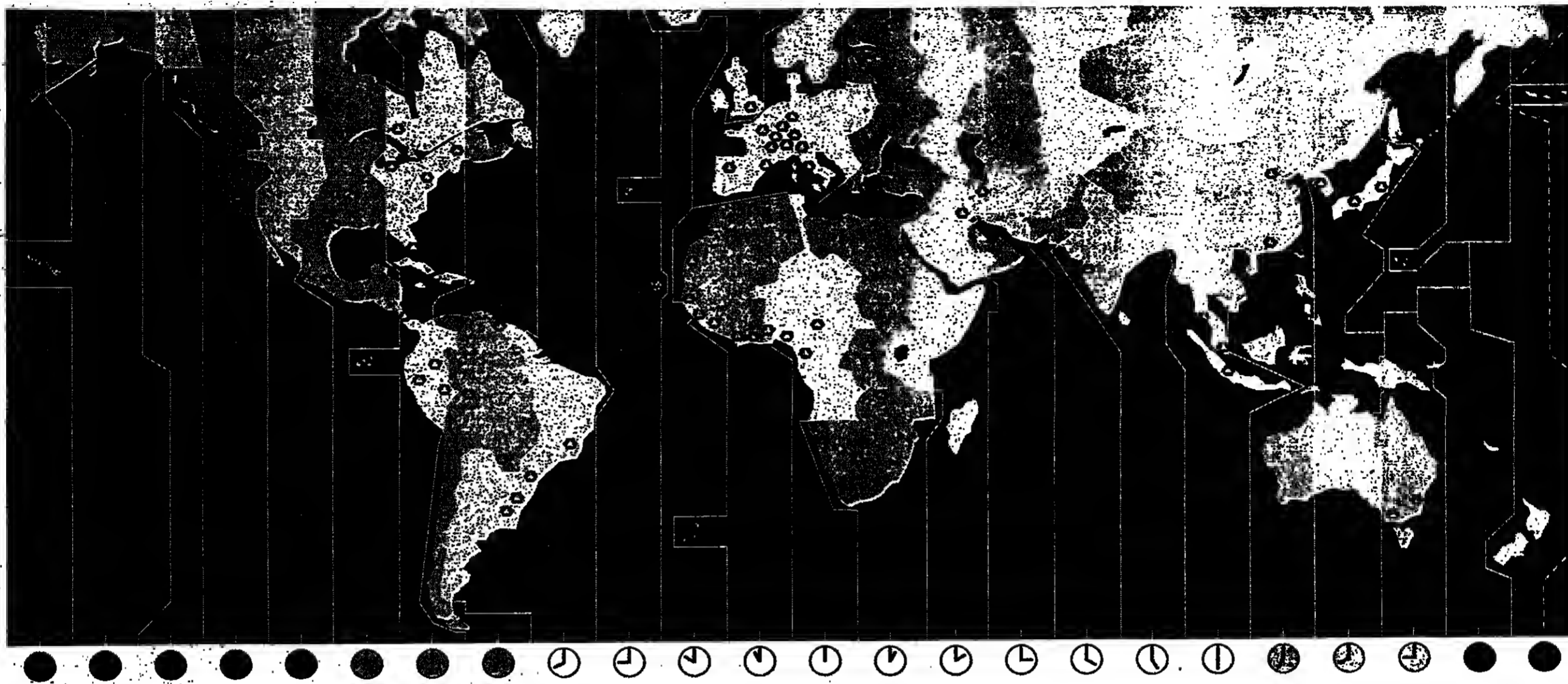
Advertisement for Cambium Venture Capital PLC. Text includes: 'This notice is issued by Greig, Middleton & Co. Limited, in compliance with the requirements of the Council of The Stock Exchange... Issue of 25,000,000 Ordinary Shares of 5p each in connection with the acquisition of the 51% of the issued share capital of Uniyaral Shipyards (Solent) Limited...'

Advertisement for U.S. \$200,000,000 ML TRUST VI. Text includes: 'Collateralized Mortgage Obligations Floater Class A Bonds. In accordance with the provisions of the Bonds notice is hereby given that the Rate of Interest has been fixed at 9 1/4% for the ninth Floater Interest Period of 20th January, 1989 through 19th April, 1989...'

Advertisement for Rolex watches. Text includes: 'ROLEX. World prices for fine watches have never been higher. Sell now and you'll call at the top of the market especially vintage watches made from 1930 to 1980...'

Advertisement for Farepak plc. Text includes: 'Farepak plc (Incorporated in England under the Companies Act 1948 to 1981 with Registered No. 1782133). Placing by Hoare Govett Corporate Finance Limited of 1,352,025 Ordinary shares of 20p each at 125p per share...'

We have got all the time in the world for you.



Around the world, wherever the sun rises on a new business day, there's a Dresdner Bank office ready to serve you — in the Near, Middle, or Far East; in Europe, Africa, or the Americas. That's because Dresdner Bank is at home in over 50 countries, including all the world's major financial centers.

Take advantage of our worldwide presence and 100 years of banking experience.

You'll find Dresdner Bank providing

in-depth market analysis as well as trade and investment financing, purchasing and selling foreign currencies and ensuring a smooth transfer of funds — 24 hours a day.

In fact, about one fifth of West Germany's foreign trade transactions are processed through the Dresdner Bank Group. And during the course of a year, the total of all the domestic and international transactions handled by Dresdner Bank add up to \$120 billion.

Which makes us one of the world's largest and most experienced international banks.

Yet, Dresdner Bank's help extends beyond just saving you time and money. Thanks to our Electronic Banking Services and extensive correspondent banking network, we can help you do business profitably in every corner of the globe.

Your success in each market requires a unique approach and thor-

ough understanding of local customs, thereby helping you formulate and implement clear-cut goals. You can rely on Dresdner Bank's highly regarded and sophisticated financial packages as well as our knowledgeable assistance in the complex, often time-consuming process of establishing new business ventures.

When could we discuss your special requirements in detail?

Dresdner Bank has all the time in the world for you.

Dresdner Bank

FT UNIT TRUST INFORMATION SERVICE

For Current Unit Trust Prices on any telephone ring direct 0836 4 + five digit code (listed below). Calls charged at 38p per minute peak and 25p off peak, inc VAT

AUTHORISED UNIT TRUSTS

Table listing various unit trusts such as Abbey Unit Trust, American Growth, and others, with columns for name, manager, and contact info.

Table listing unit trusts including British American, British Columbia, and others, with columns for name, manager, and contact info.

Table listing unit trusts including British Columbia, British Columbia, and others, with columns for name, manager, and contact info.

Table listing unit trusts including British Columbia, British Columbia, and others, with columns for name, manager, and contact info.

Table listing unit trusts including British Columbia, British Columbia, and others, with columns for name, manager, and contact info.

Table listing unit trusts including British Columbia, British Columbia, and others, with columns for name, manager, and contact info.

Table listing unit trusts including British Columbia, British Columbia, and others, with columns for name, manager, and contact info.

Table listing unit trusts including British Columbia, British Columbia, and others, with columns for name, manager, and contact info.

GUIDE TO UNIT TRUST PRICING. Includes sections for INITIAL CHARGES, FUTURE CHARGES, and a note about the FT Unit Trust Information Service.

Handwritten text at the bottom center of the page.

FT UNIT TRUST INFORMATION SERVICE

For Current Unit Trust Prices on any telephone ring direct-0634 + five digit code (listed below). Calls charged at 39p per minute peak and 25p off peak, inc VAT

Main table containing unit trust information with columns for company name, unit price, and other financial details. Includes sections for 'OTHER UK UNIT TRUSTS' and 'INSURANCES'.

OTHER UK UNIT TRUSTS

INSURANCES

Continued on next page

FT UNIT TRUST INFORMATION SERVICE

For Current Unit Trust Prices on any telephone ring direct-0834 + five digit code (listed below). Calls charged at 35p per minute peak and 25p off peak, inc VAT

Main table containing unit trust information, organized into columns for various categories like 'MANAGEMENT SERVICES', 'GUERNSEY AUTHORIZED', 'OFFSHORE AND OVERSEAS', 'JERSEY AUTHORIZED', 'BERMUDA AUTHORIZED', and 'LONDON AUTHORIZED'. Each entry includes the name of the trust, its management company, and current unit prices.

Handwritten text at the bottom center of the page, possibly a signature or note.

FT UNIT TRUST INFORMATION SERVICE

Main table containing FT Unit Trust Information Service data, including columns for fund names, share prices, and other financial metrics.

LONDON SHARE SERVICE

Table containing London Share Service data, including sections for British Funds, Foreign Bonds & Rails, and various financial indices.

OTHER OFFSHORE FUNDS

Table containing Other Offshore Funds data, listing various international investment funds and their performance.

Money Market Trust Funds

Table containing Money Market Trust Funds data, listing various money market funds and their details.

Money Market Bank Accounts

Table containing Money Market Bank Accounts data, listing various bank accounts and their interest rates.

LONDON SHARE SERVICE

For Latest Share Prices on any telephone ring direct-0836 43 + four digit code (listed below). Calls charged at 35p per minute peak and 25p off peak, inc VAT

AMERICANS - Contd

Table listing American stocks such as IBM, General Electric, and Ford, with columns for stock name, price, and date.

CANADIANS

Table listing Canadian stocks such as Canadian Pacific, Northern Telecom, and Alcan, with columns for stock name, price, and date.

BANKS, HP & LEASING

Table listing bank and leasing stocks such as Bank of Montreal, Royal Bank, and Finance Trust, with columns for stock name, price, and date.

BEERS, WINES & SPIRITS

Table listing beer, wine, and spirit stocks such as Carlsberg, Heineken, and J & J, with columns for stock name, price, and date.

BUILDING, TIMBER, ROADS

Table listing building, timber, and road stocks such as Bovis Lend Lease, Wimpey, and Bechtel, with columns for stock name, price, and date.

BUILDING, TIMBER, ROADS - Contd

Continuation of Building, Timber, and Roads stocks, including companies like Bovis Lend Lease and Wimpey.

CHEMICALS, PLASTICS

Table listing chemical and plastic stocks such as ICI, Shell Chemicals, and British Petroleum, with columns for stock name, price, and date.

DRAPERY AND STORES

Table listing drapery and store stocks such as Debenhams, Marks & Spencer, and Next, with columns for stock name, price, and date.

BUILDING, TIMBER, ROADS

Continuation of Building, Timber, and Roads stocks, including companies like Bovis Lend Lease and Wimpey.

ELECTRICALS

Table listing electrical stocks such as British Electric, General Electric, and ICI, with columns for stock name, price, and date.

ENGINEERING - Contd

Continuation of Engineering stocks, including companies like British Electric and General Electric.

ENGINEERING

Table listing engineering stocks such as British Electric, General Electric, and ICI, with columns for stock name, price, and date.

ENGINEERING - Contd

Continuation of Engineering stocks, including companies like British Electric and General Electric.

FOOD, GROCERIES, ETC

Table listing food and grocery stocks such as Asda, Sainsbury, and Marks & Spencer, with columns for stock name, price, and date.

INDUSTRIALS (Misc.)

Table listing miscellaneous industrial stocks such as British Petroleum, ICI, and Shell, with columns for stock name, price, and date.

INDUSTRIALS (Misc.) - Contd

Continuation of Miscellaneous Industrial stocks, including companies like British Petroleum and ICI.

INDUSTRIALS (Misc.)

Table listing miscellaneous industrial stocks such as British Petroleum, ICI, and Shell, with columns for stock name, price, and date.

HOTELS AND CATERERS

Table listing hotel and catering stocks such as Whitbread, Carlsberg, and Heineken, with columns for stock name, price, and date.

INDUSTRIALS (Misc.) - Contd

Continuation of Miscellaneous Industrial stocks, including companies like British Petroleum and ICI.

INSURANCES

Table listing insurance stocks such as Prudential, Royal Indemnity, and Commercial Union Assurance, with columns for stock name, price, and date.

LEISURE

Table listing leisure stocks such as British Airways, British Cattle, and British Airways, with columns for stock name, price, and date.

Handwritten text at the bottom of the page, possibly a signature or note.

Handwritten text at the top center of the page, possibly a name or signature.

LONDON SHARE SERVICE

For Least Share Prices on any telephone ring direct-0636 43 + four digit code (listed below). Calls charged at 35p per minute peak and 25p off peak. Inc VAT

LEISURE - Contd

Table of Leisure shares including titles like Leisure Group, Leisure Properties, and Leisure Investments with columns for price, bid, and ask.

PROPERTY

Table of Property shares including titles like Property Group, Property Investments, and Property Development.

TEXTILES - Contd

Table of Textiles shares including titles like Textiles Group, Textiles Properties, and Textiles Investments.

TRUSTS, FINANCE, LAND - Contd

Table of Trusts, Finance, and Land shares including titles like Trusts Group, Finance Investments, and Land Development.

OIL AND GAS - Contd

Table of Oil and Gas shares including titles like Oil Group, Gas Investments, and Oil Properties.

MINES - Contd

Table of Mines shares including titles like Mines Group, Mining Investments, and Mining Properties.

MOTORS, AIRCRAFT TRADES

Table of Motors and Aircraft Trades shares including titles like Motors Group, Aircraft Investments, and Aircraft Properties.

TOBACCO

Table of Tobacco shares including titles like Tobacco Group, Tobacco Investments, and Tobacco Properties.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, and Land shares including titles like Trusts Group, Finance Investments, and Land Development.

OVERSEAS TRADERS

Table of Overseas Traders shares including titles like Overseas Group, Overseas Investments, and Overseas Properties.

PLANTATIONS

Table of Plantations shares including titles like Plantations Group, Plantations Investments, and Plantations Properties.

THIRD MARKET

Table of Third Market shares including titles like Third Market Group, Third Market Investments, and Third Market Properties.

NEWSPAPERS, PUBLISHERS

Table of Newspapers and Publishers shares including titles like Newspapers Group, Publishers Investments, and Publishers Properties.

SHIPPING

Table of Shipping shares including titles like Shipping Group, Shipping Investments, and Shipping Properties.

SHOES AND LEATHER

Table of Shoes and Leather shares including titles like Shoes Group, Leather Investments, and Shoes Properties.

DIAMOND AND PLATINUM

Table of Diamond and Platinum shares including titles like Diamond Group, Platinum Investments, and Diamond Properties.

FINANCE

Table of Finance shares including titles like Finance Group, Finance Investments, and Finance Properties.

REGIONAL & IRISH STOCKS

Table of Regional and Irish Stocks shares including titles like Regional Group, Irish Investments, and Regional Properties.

PAPER, PRINTING, ADVERTISING

Table of Paper, Printing, and Advertising shares including titles like Paper Group, Printing Investments, and Advertising Properties.

SOUTH AFRICANS

Table of South Africans shares including titles like South Africans Group, South Africans Investments, and South Africans Properties.

TEXTILES

Table of Textiles shares including titles like Textiles Group, Textiles Investments, and Textiles Properties.

OIL AND GAS

Table of Oil and Gas shares including titles like Oil Group, Gas Investments, and Oil Properties.

FINANCE

Table of Finance shares including titles like Finance Group, Finance Investments, and Finance Properties.

TRADITIONAL OPTIONS

Table of Traditional Options shares including titles like Traditional Options Group, Traditional Options Investments, and Traditional Options Properties.

PROPERTY

Table of Property shares including titles like Property Group, Property Investments, and Property Development.

TEXTILES - Contd

Table of Textiles shares including titles like Textiles Group, Textiles Properties, and Textiles Investments.

TRUSTS, FINANCE, LAND

Table of Trusts, Finance, and Land shares including titles like Trusts Group, Finance Investments, and Land Development.

OIL AND GAS - Contd

Table of Oil and Gas shares including titles like Oil Group, Gas Investments, and Oil Properties.

MINES - Contd

Table of Mines shares including titles like Mines Group, Mining Investments, and Mining Properties.

OVERSEAS TRADERS

Table of Overseas Traders shares including titles like Overseas Group, Overseas Investments, and Overseas Properties.

Notes and footnotes at the bottom of the page, including information about share prices and market conditions.

CURRENCIES, MONEY AND CAPITAL MARKETS

FOREIGN EXCHANGES REVIEW

EMS realignment can be delayed

A REALIGNMENT of the European Monetary System has become the subject of speculation. The EMS has virtually divided into two, with a strong group of the D-Mark, Dutch guilder and Irish punt, followed by the weak group of Belgian and French francs, Danish krone and Italian lira.

France. It seems obvious that if prices are rising faster in France, and the exchange rate is fixed against the D-Mark, French goods will eventually be priced out of the market, when competing with German products.

FT-ACTUARIES WORLD INDICES

Jointly compiled by The Financial Times Limited, Goldman, Sachs & Co., and County NatWest/Weed Mackerzie in conjunction with the Institute of Actuaries and the Faculty of Actuaries

Table with columns: NATIONAL AND REGIONAL MARKETS, FRIDAY JANUARY 20 1989, THURSDAY JANUARY 19 1989, DOLLAR INDEX. Lists various indices like Australia 100, Austria 100, Belgium 63, etc.

Table with columns: \$ IN NEW YORK, CURRENCY RATES, CURRENCY MOVEMENTS, OTHER CURRENCIES. Shows exchange rates for various currencies.

Table with columns: EURO-CURRENCY INTEREST RATES, POUND SPOT-FORWARD AGAINST THE POUND, DOLLAR SPOT-FORWARD AGAINST THE DOLLAR. Shows interest rates and forward rates.

Base index: Dec 31, 1986 = 100; Finland: Dec 31, 1987 = 115.037 (US \$ index), 90.791 (Pound Sterling) and 94.94 (Local); Nordic: Dec 30, 1988 = 139.62 (US \$ index), 114.42 (Pound Sterling) and 123.18 (Local).

EUROPEAN OPTIONS EXCHANGE

Table showing European options exchange data with columns: Series, Bid, Ask, Last, etc.

BASE LENDING RATES

Table showing base lending rates for various banks and currencies.

Table with columns: EXCHANGE CROSS RATES. Shows cross rates for various currencies.

Table with columns: MONEY MARKETS, NEW YORK, LONDON MONEY RATES. Shows money market data.

Table with columns: EQUITIES, FIXED INTEREST STOCKS. Shows equity and fixed interest stock data.

Table with columns: RIGHTS OFFERS. Shows rights offers data.

MONEY MARKETS

Optimism in London is edged with caution

LAST WEEK'S rise of 1/2 per cent in the West German Bundesbank's discount and Lombard rates does not appear to have brought a realignment of the EMS any nearer.

FT LONDON INTERBANK FIXING

Table showing FT London Interbank Fixing rates for various currencies.

BANK OF ENGLAND TREASURY BILL TENDER

Table showing Bank of England Treasury Bill Tender details.

WEEKLY CHANGE IN WORLD INTEREST RATES

Table showing weekly change in world interest rates for various regions.

LONDON RECENT ISSUES

Table showing London recent issues for various companies.

CROSSWORD

No. 6,841 Set by TANTALUS

Crossword puzzle grid with clues for Across and Down.

Sheriff Holdings plc advertisement including company details, share information, and contact details.

Financial Times advertisement for Spain, including survey details and contact information.

Financial Times advertisement for Spain, including survey details and contact information.

Advertisement for Jotter Pad, including a crossword puzzle and contact details.

WORLD STOCK MARKETS

Table with columns: High, Low, January 20, Price, Change. Includes sections for Australia, France, Germany, Italy, and Sweden.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Canada, Japan, and New York Active Stocks.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Tokyo, MONTREAL, and INDICES.

Table with columns: High, Low, January 20, Price, Change. Includes sections for NEW YORK, DOW JONES, and various market indices.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Australia, France, Germany, Italy, and Sweden.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Canada, Japan, and New York Active Stocks.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Tokyo, MONTREAL, and INDICES.

Table with columns: High, Low, January 20, Price, Change. Includes sections for NEW YORK, DOW JONES, and various market indices.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Australia, France, Germany, Italy, and Sweden.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Canada, Japan, and New York Active Stocks.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Tokyo, MONTREAL, and INDICES.

Table with columns: High, Low, January 20, Price, Change. Includes sections for NEW YORK, DOW JONES, and various market indices.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Australia, France, Germany, Italy, and Sweden.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Canada, Japan, and New York Active Stocks.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Tokyo, MONTREAL, and INDICES.

Table with columns: High, Low, January 20, Price, Change. Includes sections for NEW YORK, DOW JONES, and various market indices.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Australia, France, Germany, Italy, and Sweden.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Canada, Japan, and New York Active Stocks.

Table with columns: High, Low, January 20, Price, Change. Includes sections for Tokyo, MONTREAL, and INDICES.

Table with columns: High, Low, January 20, Price, Change. Includes sections for NEW YORK, DOW JONES, and various market indices.

NYSE COMPOSITE PRICES

Table of NYSE Composite Prices listing various stocks with columns for stock name, price, and change. Includes a note about dividend dates and a 'Continued from previous page' header.

OVER-THE-COUNTER

Nasdaq national market, 4pm prices January 19

Table of Over-the-Counter prices listing various stocks with columns for stock name, price, and change. Includes a note about dividend dates.

AMEX COMPOSITE PRICES

4pm prices January 19

Table of AMEX Composite Prices listing various stocks with columns for stock name, price, and change.

Free hand delivery service advertisement for Madrid, Barcelona, Bilbao, and Sevilla. Includes contact information for Madrid (01) 7339548 and a note to ask IPS for details.

The Business Column

A dearth of poets and programs

Britain has a shortage of information technology (IT) specialists, a recent Confederation of British Industry report suggests, to leave the country "dangerously exposed" in international trade.

This is not new. For as long as digital computers have been applied to business there has been an acute shortage of data processing specialists. This is not unique to the UK; every developed country has more computers, literally and metaphorically, than people to program them.

And even when IT specialists do set fingers to keyboards, the results seem less than satisfactory. US research into a series of federal software projects showed that only 2 per cent of the software written was usable as delivered; 47 per cent was paid for but never delivered, 29 per cent was delivered but never used and 19 per cent abandoned or rewritten.

Most people involved in software development looking at these figures will feel a sliver of familiarity. So, on the face of it, if measures are put in train to ease the UK's apparent shortage of IT manpower, the result seems likely to be the recruitment of more and more people to create more and more software that neither works nor is fit for its intended purpose.

A simplistic conclusion, certainly, but one which sets the scene for the question of whether the apparent demand for IT specialists can ever be met. There are good reasons for thinking the answer is no.

Never-ending queue for good software

To some extent, of course, the queue for good software is like the queue for free medical treatment - endless by definition. But there are at least two further factors to be considered - the aptitude of the workforce and the complexity of the problem.

One, not too facetious, approach to the first is to consider the UK's shortage of poets. Poets are not yet considered indispensable to Britain's industrial progress, but this may be only a matter of time. The authoritative body which uncovers the shortage will, no doubt, prescribe urgent action - training, planning, remuneration to remedy the situation. But to what avail?

Some potential poets will find the task beyond them. Others will find the work ungenial. Yet others will fail to progress beyond simple doggerel. So it is with computer software. While computer specialists like to believe that everybody should be computer literate, the evidence is to the contrary. All the encouragement and high salaries in the world may never bring enough of the right kind of minds into data processing.

We may have to settle for a community of IT specialists that is smaller than the experts think is necessary. The model should be the modern armed forces where battalions of cannon-fodder have given way to a compact, highly trained elite, with modern, effective weapons.

The IT equivalent of today's soldiers are excellently described in the CBI report as "51 per centers" - people skilled in IT but with almost as much skill in the business areas to which their computing expertise has to be applied.

The kind of weapons needed by these 51 per centers leads to the second critical factor, complexity. Are today's computer systems already too complex for mere human minds? Many IT specialists believe they are and are seriously concerned about the consequence of entrusting human lives to such systems. They argue the best answer is to apply computer power to the business of producing high quality, efficient software.

The UK is already a leader in the development of these "software engineering tools", a medium of extra support for software engineering could prove more beneficial than panic measures to persuade more young people to become IT specialists - or poets.

Alan Cane

*Changes in IT skills - the impact of technology, CBI, 103 New Oxford Street, London WC1A 1DU.

Sir Francis Tombs is arguably the best-known engineer in British business today, although not everyone knows he is an engineer.

He has presided over a conspicuous improvement in the fortunes of three international engineering companies during the 1980s, including Rolls-Royce, a name still synonymous with the best that engineering can offer.

As chairman of the Advisory Council on Science and Technology (Acost), he advises the Prime Minister on engineering. He also advises N.M. Rothschild, the merchant bank, on such projects as investment in the infamous Sinclair electric car. "I was not enthusiastic."

As chairman of the Engineering Council until last year, he was embroiled in the engineering industry's efforts to educate more and better professional engineers, and to change the widely-held public image of an engineer as someone in overalls.

Frank Tombs is a round, slightly rumped man of 64, whose sartorial insonance ensures that he is unlikely to be mistaken for a banker. His face also breaks easily into an engaging grin. Colleagues know when he is angry because he becomes uncharacteristically quiet.

Tombs brusquely rejects the fashionable term "company doctor" for his role in restoring favour with the City, successively, the Weir group, Turner & Newall and Rolls-Royce. He prefers the term manager and says self-deprecatingly that the task required nothing more than "the application of logic to difficult situations."

That logic he learned training to be an engineer, starting with the General Electric Company in Birmingham during the Second World War, when evening classes at the Birmingham College of Technology alternated with spells at a first aid post. After the war he became a graduate trainee in electricity supply for Birmingham Corporation, learning both to run a power station and to control the grid.

By 1952 he was an operating efficiency engineer with the GEC wood-chip industry. But GEC wooed him back, to its Eritrh turbine-generator factory in Kent as a troubleshooter for its products. He rose to general manager, learning a lot from the young Arnold Weinstock, before finding his company sold off to Parsons in 1955. Lord Weinstock, he says, has since admitted to him that this sale was a big mistake.

Irritation with the ways of accountants led him in his mid-30s to read in his spare time for an external London degree in economics. This taught him enough to get accountants worked, he says. But his engineering experience has taught him to examine evidence critically, and to

THE MONDAY INTERVIEW

Engineering the future

David Fishlock talks to Sir Francis Tombs, chairman of Rolls-Royce

make decisions on the basis of inadequate data. "Engineering develops the judgmental qualities." Those qualities are readily translated into the kind of commercial situation in which he has made his name. "Then engineers are willing to do it, they can make very good managers," he believes.

In 1963 he landed the post of director of engineering with the South of Scotland Electricity Board - the first job he had applied for since starting his career. He became deputy chairman and then chairman by 1974. He came to public attention as the ever-amiable but unwavering opponent of the Central Electricity Generating Board's plans to intro-

PERSONAL FILE

- 1924 Born
- 1939 Joined GEC
- 1974-77 Chairman, South of Scotland Electricity Board
- 1977-80 Chairman, Electricity Council
- 1978 Joined Weir
- 1981-83 Chairman, Weir group
- 1982 Chairman, Turner & Newall
- 1985 Chairman, Rolls-Royce
- 1987 Chairman, Advisory Council for Research and Development

duce the US nuclear pressurised water reactor (PWR).

Tombs remains convinced that Britain should not be building big PWR power stations, even though he is chairman of a company which has built more than a score of PWR propulsion plants for the Royal Navy. He says he has no doubts about its safety as a sea-going engine, but does not accept that it will be as safe in a power station as the British reactor designs.

When offered the post of Rolls-Royce chairman, he warned Mr Norman Tebbit, then Industry Secretary responsible for the state-owned company, that he would continue to speak out against the Sizewell PWR project. To its credit, says Tombs, the Government raised no objection. This month, however, he has given his blessing to a scheme

for Rolls-Royce to pursue a new design of PWR, in partnership with the UK Atomic Energy Authority and two US companies, as a prospective power-plant for small nuclear power stations.

The nuclear debate apart, Tombs broke free from electricity in 1961, just as he was reaching the pinnacle of his profession, by becoming president of the Institution of Electrical Engineers. Mr Tony Benn, then Energy Secretary, had brought him back to London, as chairman of the Electricity Council, lured, Tombs says, by a promise that he would head a unified industry incorporating the CEBG. But Benn - "an arch-procrastinator," according to Tombs - changed his mind.

Tombs challenged the new Thatcher Government to keep the promise instead, only to be told that it could hardly be seen to adopt a plan of Mr Benn's. He resigned - without, he says, any idea what he might do next. In fact, the first invitation came on the day he announced his resignation. It was from Lord Rothschild, the bio-scientist, then chairman of the family merchant bank. Tombs is still on N.M. Rothschild's board and is chairman of its audit committee.

He was next approached to help the Weir group, then in dire straits. Tombs became its chairman from 1981 to 1983. Soon afterwards, he was approached about another company in desperate need of a rescue, which turned out to be Turner & Newall.

Tombs finds common factors in their distress. Each had taken its eye off the ball in attempts to diversify from a sound traditional business into areas it did not understand. With Weir, the attempted diversification was desalination, with T&N it was plastics and chemicals. Both firms became over-reliant on computers, asking too many questions and allowing the answers to drown in print-out. "All the real messages were lost."

"I'm lucky in having a very simple mind," Tombs grins. Rolls-Royce he already knew as a director, from 1982, when he was head-hunted following the sudden death of Sir Wil-

liam Danzom in 1985. By now exasperated with the fickleness of political decision-making, he asked for - and got - an assurance that he was to prepare Rolls for a return to the private sector. "My only condition," he says.

Today, Weir, T&N and Rolls-Royce are all managed by engineers he has chosen. At Rolls-Royce it is Sir Ralph Robins, one who "always has his eye on the bottom line". As with the other groups, there are many temptations to diversify. Its big US rivals are already more diversified. Moreover, Rolls-Royce is spending about £180m of its own money on research and development - "and we might as well get any fringe benefits that are going," Tombs says.

However, one area of diversification has been abandoned for the time being, at least. Well-publicised takeover talks with Northern Engineering Industries, the power-plant group, ended late last year because of what Rolls called an unbridgeable gap in price.

Thirty years' experience as the dominant partner in Rolls-Royce and Associates, the defence consortium that has built 20 PWRs for the Royal Navy, does provide one opportunity for fringe benefits. Plans for the new "safe integral reactor" a 300 MW PWR, "may prove to be an interesting development of our existing nuclear interests. Time will tell."

The memorandum of understanding just signed between the company, the UK Atomic Energy Authority, and Combustion Engineering and Stone and Webster in the US, is an agreement to study the funding and market opportunities for this advanced engineering system for the next century, he says.

Nevertheless, he is determined Rolls-Royce will not take its eye off the ball, for he says he is confident its tradi-



'When engineers are willing to do it, they can make very good managers'

tional aero-engine business offers immense opportunities for the future.

As chairman of Acost, comprising some of the nation's top technical talent, he has a unique view of the future. Tombs believes Britain is in better shape today than ever before in his own career, and that the quality of its management has never been higher. Its industrial management is now admired worldwide, he says, by Americans especially. "I'm not conscious that much is holding back Britain at the

moment."

If there is one restraint, it is awareness of the importance of investing in research and development, he says. He cites Rolls-Royce, crucially dependent on R&D, as an example of how naive City analysis can be.

Last year the company's investment in R&D was unusually high, and this was criticised as bad, he says. This year it returned to more normal levels and, says Tombs, this was also criticised as bad. "In both cases they should have been

more concerned with what the money was being spent on," he says.

Launch aid from government for a major new project is another misunderstood investment, he says. Although he has little love for politicians, he still believes government should be prepared to help a company like Rolls-Royce to keep Britain at the forefront of engineering with launch aid for high-technology ventures. He is currently seeking £100m to help launch a new civil aero-engine.

The case for identity cards

My father often recalled that in the golden, pre-1914 times, he could travel abroad freely, without a passport. He thought that passports diminished personal freedom and were an intrusion on privacy.

Nowadays we no longer view passports as a bureaucratic nuisance, but rather as useful, benign and even beneficent instruments. Millions travelling abroad each year in search of sun or snow are rather proud when they get their first passport. However, the era of the passport seems to be coming to its end.

As a result of the post-1945 explosion of travel, frontier guards or immigration officers no longer have the time to look at them properly; they just wave you through. Nationals of the member states of the European Community can use identity cards instead of passports, but neither passports nor identity cards will be of much use unless they are soon made readable by electronic means.

In the golden age of small villages and self-conscious provincial towns, people knew each other, or could easily establish their identity. As we all became aliens inhabiting, or moving in, huge cities, identification became more difficult.

The driving licence became the first identity card, soon to be replaced by the credit card - for many, the young in particular, a temptation to get heavily into debt at usurious rates of interest.

During the Second World War we all had identity cards, and were no worse for it. They were hardly designed by security experts, every espionage apprentice could forge them easily. But they were indispensable for food and other rationing and quite useful in establishing the name and address of a victim of accident, of whom there were many during the blitz.

For some reason, which nobody has been able to explain to me satisfactorily, many people now consider the suggestion that there is a need for peacetime identity cards as



A.H. HERMANN

absolutely outrageous. It would be the end of privacy, freedom and democracy, they say. It would turn the UK into a police state. Why, every policeman could ask you who you were and demand the production of your identity card! The next thing would be random breathalyser tests.

These objections seem to me irrational to say the least. If there is any good reason for it, the police can ask you who you are and what you are doing anyhow. And random breathalysing is no waste of your breath; it could save thousands of lives, yours included, in the same way as safety belts which are a greater, though apparently a more acceptable, constraint on freedom of movement.

Why should honest citizens going peacefully about their business or pleasure feel such reluctance to reveal who they are? A wall-designed, machine-readable identity card, recording blood group, allergies and any medication on which the holders depend, could save lives in case of accident. Passing the card through a reader when boarding a ferry or an airliner could resolve some of the problems and anxieties following a disaster.

In addition to the obligatory contents, such as name, description, genetic fingerprint and address, additional information could be stored on the card, according to the bearer's choice. Such items might include the health data already mentioned, next of kin, marital status, employer, car registration number and the number

of your car key. Indeed, I would treasure my identity card as an insurance against falling memory.

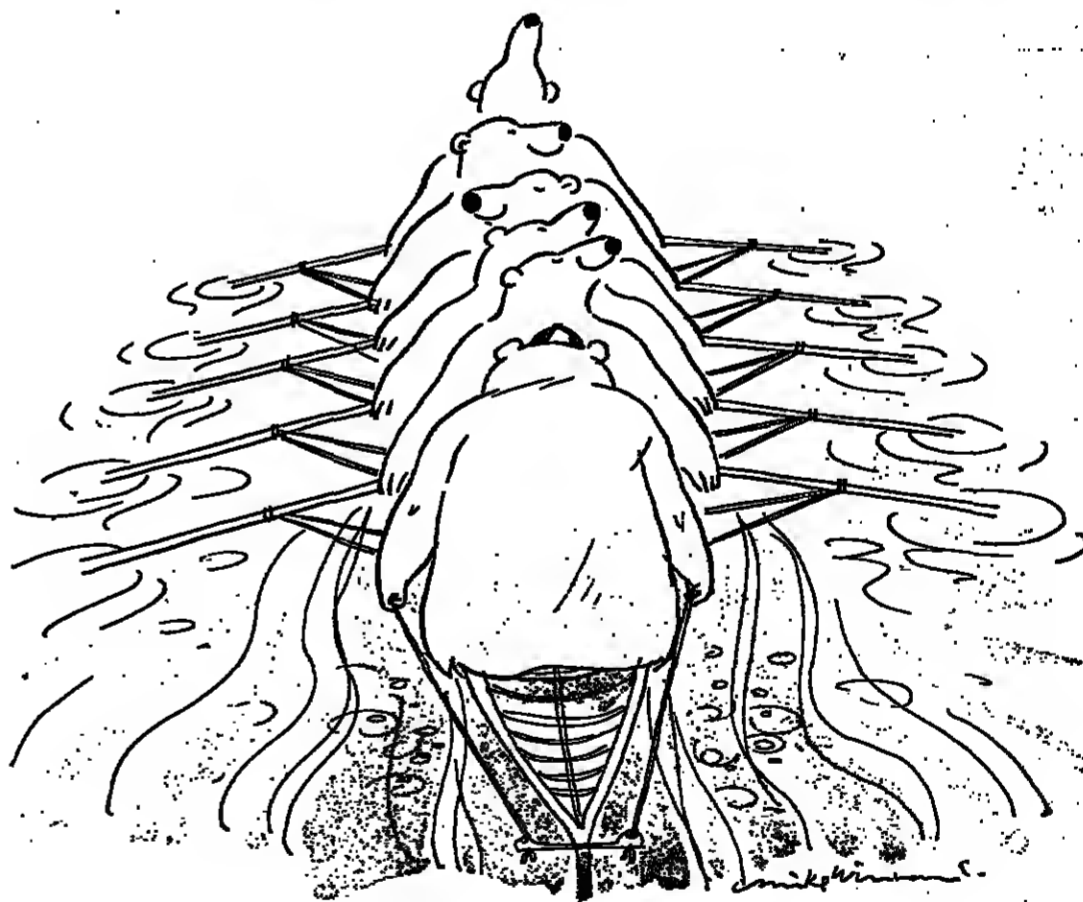
The possibility that the police could endorse my card with a magnetic command and making the reading machine at the entrance to the terraces scream: "Stop that hooligan!" would hardly worry me. I have never been able to understand why so much passion is spent over 22 rather childish adults kicking a ball from one side of the field to the other.

An identity card could prove a real blessing to the very large number of young people, and some older ones too, who come into conflict with the law in a non-violent way, or are suspected by the police of having done so. Often they are detained and kept in police cells for the sole reason that they cannot convincingly show an address where they can be found, or from where they could be summoned before a magistrate.

Identity cards could stop the congestion of police cells and other places of remand and, more important, they would spare the youthful suspects the trauma, the stigma and the undesirable education obtained inside.

In 1987 nearly a quarter of all detected offenders were young people aged 17 to 20. Half of these 130,000 offenders were found guilty of theft or handling stolen goods, which is mostly a teenage aberration, often brought about by lack of better opportunities for self-assertion. Most erring youth will grow out of petty crime and crime in general in various ways, but not by being put inside, and being taught new tricks by professionals, and thus made more hostile to authority than they naturally are at their age.

Custody promotes crime. About 65 per cent of those leaving youth custody or detention centres are reconvicted for further offences within two years. A new approach by magistrates is badly needed, but they seem to be difficult to re-educate. In the meantime, identity cards could help a little, at least.



Teamwork has its rewards.

If you invest internationally, you expect from your bank in these turbulent times sound, individual counsel in the classic tradition of Swiss private banking. Headquartered in Zurich, Bank Julius Baer, one of Switzerland's most prestigious private banks, also operates in London and in New York. Our teams of international asset managers have taken a conservative yet innovative approach to capital preservation and enhancement for over 40 years, serving private and institutional clients around the world. Bank Julius Baer. A team on your side.

JBcoB

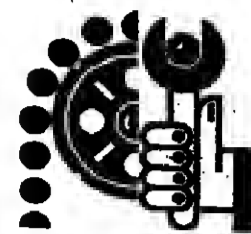
BANK JULIUS BAER
For the Fine Art of Swiss Banking

Zurich, Bahnhofstrasse 36, 8010 Zurich - London, Bankers House, Bankers Row, London EC3A 7NE
New York - Geneva - San Francisco - Mexico City - Hong Kong - Tokyo

Member of IMRO.

Handwritten text at the bottom of the page, possibly a signature or reference.

FINANCIAL TIMES SURVEY



A boom year was enjoyed in 1988. Now the brakes have been applied, however, and demand could

slacken. Other concerns will include continued European rationalisation and increased globalisation of markets, writes Terry Dodsworth, Industrial Editor

Year that would bear repeating

THROUGHOUT the developed world, analysts must be hoping for a repetition this year of the conditions they experienced in 1988. Against most expectations, manufacturers enjoyed a genuine *annus mirabilis* last year, with production bounding ahead, a world-wide investment boom, steady rises in productivity and sustained increases in profitability. It was a far cry from the forecasts of doom that followed the slump in the world's stock markets in 1987.

The one large cloud on this bright blue horizon was the growing fear of a renewed burst of inflation. Prices began to edge up in most developed economies during the year. There was talk, although by no means overwhelming evidence, of capacity shortages beginning to emerge. And governments began to push interest rates up to take some of the heat out of the expansion.

This general application of the monetary brakes lies behind the less buoyant predictions for industrial performance in 1989. The co-ordinated economic stimulus employed by the leading Western nations in late 1987 is now, analysts argue, turning into an equally co-ordinated move in the opposite direction. Demand should therefore slacken, and industry will be under less pressure to expand.

The need for some slowdown in industrial expansion may seem strange after the years of recession and sluggish recovery in the early

1980s. But the strength of the recovery could be seen last year across a range of industries and geographical boundaries. These included:

- In the US, steel manufacturers enjoyed record profits of around \$2.5bn in aggregate, as they bounced back from the acute financial crisis that hit them in the mid-1980s. Production volumes rose by 9 per cent and prices by 17 per cent.
- The world's semiconductor industry leapt ahead, registering 30 per cent growth in financial terms to achieve the \$50bn a year mark in sales, and probably generating an underlying increase in volume of about 30 per cent.
- Car output accelerated to record levels.
- Sales of small and mid-range computer systems were extremely buoyant as companies turned to more departmental computing as a means of increasing productivity.
- Output of the world's chemicals industry rose dramatically after the cut-backs of the early 1980s, with production up in the three main areas of the US, Europe and Japan by almost 25 per cent since 1986.
- US exports of manufactured goods, stimulated by the slide in the dollar over the last two years, leapt by 30 per cent.
- Capital spending in industry throughout the Western world rose to the highest level in years. In Japan, expenditure jumped by 16 per cent as manufacturers strove for productivity improvements to

offset the rise in the yen. UK companies achieved similar investment growth rates, while in the US spending rose by 9.5 per cent and in West Germany by 7.5 per cent.

- Industrial production recorded substantial growth in almost all of the countries belonging to the Organisation of Economic Co-operation and Development. In the first half of last year it rose by 5.7, with particularly strong performances in Japan and the US. World exports of manufactured goods jumped by 10 per cent in the same period.
- Productivity recorded sharp increases, with output per person rising 2.5 per cent in the OECD in the year to mid-1988, well above the trends since the early 1970s.
- Profits were strong in most countries, and capacity utilisation in manufacturing rose steadily, approaching the 1984 peak level in Japan, and reaching about 83 per cent in the US.

Although producers in many of these industries report full order books for the next three to six months, there are increasing signs that the tightening of monetary conditions is taking effect.

Semiconductor manufacturers, traditionally in the vanguard of any economic slowdown, say that demand has slackened, and that there may be little growth in output this year. The personal computer industry, a major beneficiary of the investment surge in labour-saving equipment, is beginning to trim

back its forecasts. Car manufacturers believe that they have reached the top of the current demand cycle, and some chemicals producers feel that current levels of demand cannot be sustained.

Nevertheless, most analysts interpret these signals as evidence of no more than a modest downturn or stagnation in the current rate of industrial growth. Manufacturers, they say, can look forward to expansion in the OECD area economies of around 3 to 3.5 per cent this year against 4 per cent in 1988.

Moreover, industry should not have to worry unduly about inflation or rising wage demands if monetary policy works as planned. In most countries it is also felt that corporate profits and liquidity are strong enough for companies to weather increased debt financing costs relatively easily.

Yet against this relatively benign short-term outlook, industrialists have plenty of longer-term issues on their plates. Indeed, in many ways the underlying structure of world industry has rarely been as subject to potential change in the post-war era as it is today.

At the top of this list of concerns, is the ambitious plan for market integration in the European Community by 1992. Abandonment of preferential structures is designed to bring about big improvements in efficiency and the use of resources. But the general gains for society would be accompanied by some spe-

cific problems for individual companies, about half of which, according to some estimates, might disappear in a more competitive climate.

Jockeying for position in this planned new Europe has already begun. Virtually every industrial sector and each large national conglomerate will be put under the microscope in this process. Indeed, the series of international takeovers and mergers announced over the past year or so demonstrate the scale of potential changes.

The takeover of Rowntree in the UK by Nestlé of Switzerland was a radical step in the restructuring of the European confectionery industry; the expansion of Daimler-Benz in West Germany into the aerospace and defence industries has sparked a series of cross-frontier talks in these sectors involving British Aerospace in the UK and a variety of French manufacturers; and the complex takeover battle over the future of Plessey and the General Electric Company in Britain has become a Europe-wide issue with the involvement of Siemens of West Germany and Thomson of France.

This rationalisation within Europe poses problems for outsiders, particularly American and Japanese companies. These groups see themselves being excluded from several key markets where they had been anxious to expand, while at the same time being put under increasing pressure to do business on Europe's own terms. As a result,

non-European companies are looking increasingly at investment and takeover prospects in the region.

A second batch of structural problems can be grouped under the general heading of the globalisation of markets. These pull to some degree in the opposite direction to the forces many economists believe to be at play in the creation of the integrated European trading area. The emergence of the new Europe, it is often argued, could well lead to a decline in free trade and the rise of protectionism based on the three large producing zones of the US, Europe and the Far East.

Yet there are equally powerful forces pulling today in the direction of greater movement of goods and ideas across national boundaries and between these three trading blocs. Hardly any industrial sector is now immune to these pressures, which are emerging in a number of structural issues:

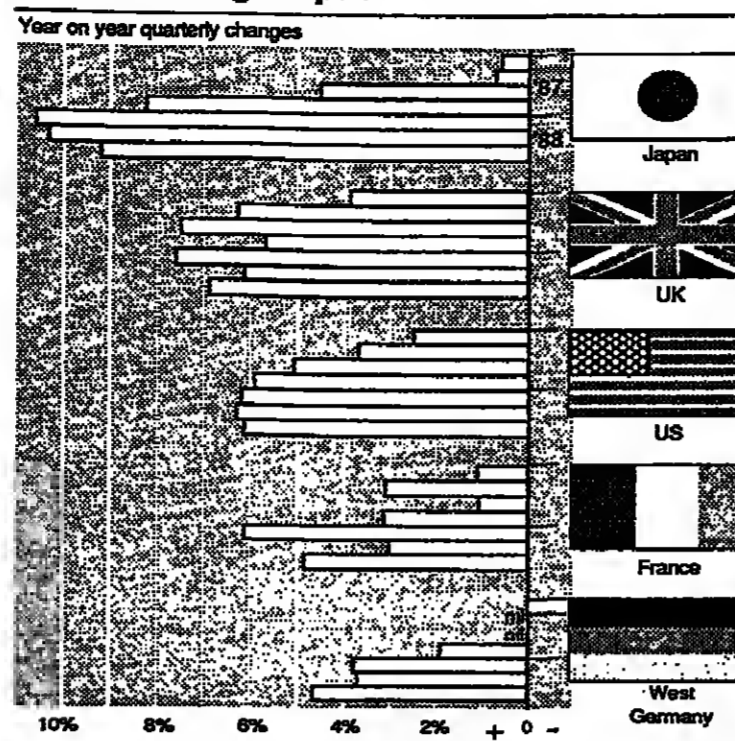
- Component sourcing: In the last decade, more and more manufacturers have begun to scour the world for components that are either cheaper elsewhere, or have some unique technological features not available in their home market.
- Rationalisation in mature industries: Several traditional industrial sectors continue to face such chronic overcapacity that manufacturers are being forced to look at international alliances or mergers. In the power station field, for exam-

ple, some estimates suggest that up to 70 per cent of world productive capability is redundant, while the diesel engine industry has 30 per cent more productive potential than it needs.

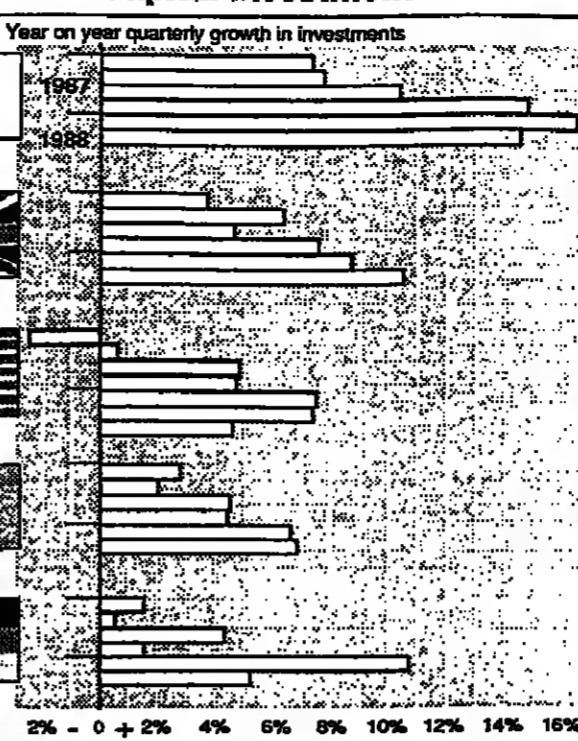
- Technology transfer: Technology-based companies are increasingly adopting multinational functional structures and aiming for international markets because of the nature of their products. The issue here is the pace of product development and high cost of research and development. New products tend to have such a short life cycle that they need to be exploited internationally to generate cash for the next round of development.

All these trends point towards the development of companies able to bring together resources and expertise in different parts of the world. To achieve these ends, companies will have to find ways of entering new markets, often through mergers and acquisitions. This, in turn, suggests that the days of the old-style national conglomerate are numbered, as their role in different areas is taken over by specialist international companies. So for industrialists everywhere, the medium-term is likely to be one of increasing international involvement, spiced with the prospect of global alliances or takeover for the weak performers.

Manufacturing output



Total Capital investment



CONTENTS

MOTOR INDUSTRY The three major markets	2
ECONOMY World prospects TAKEOVERS Increased activity	3
ELECTRONICS Computers, semiconductors Domestic appliances	4
CHEMICALS PHARMACEUTICALS	5
STEEL Consumption Production SOVIET UNION Changing relations	6
AEROSPACE Traffic expansion demands investment Competition likely to intensify	7

Graphics by Graham Lever

World Industrial Review

SAMPO WHAT?

What is the point of us printing this advertisement in a British newspaper? We are, after all, a Finnish insurance company.

Can we offer something special, something that is exceptional compared with other companies?

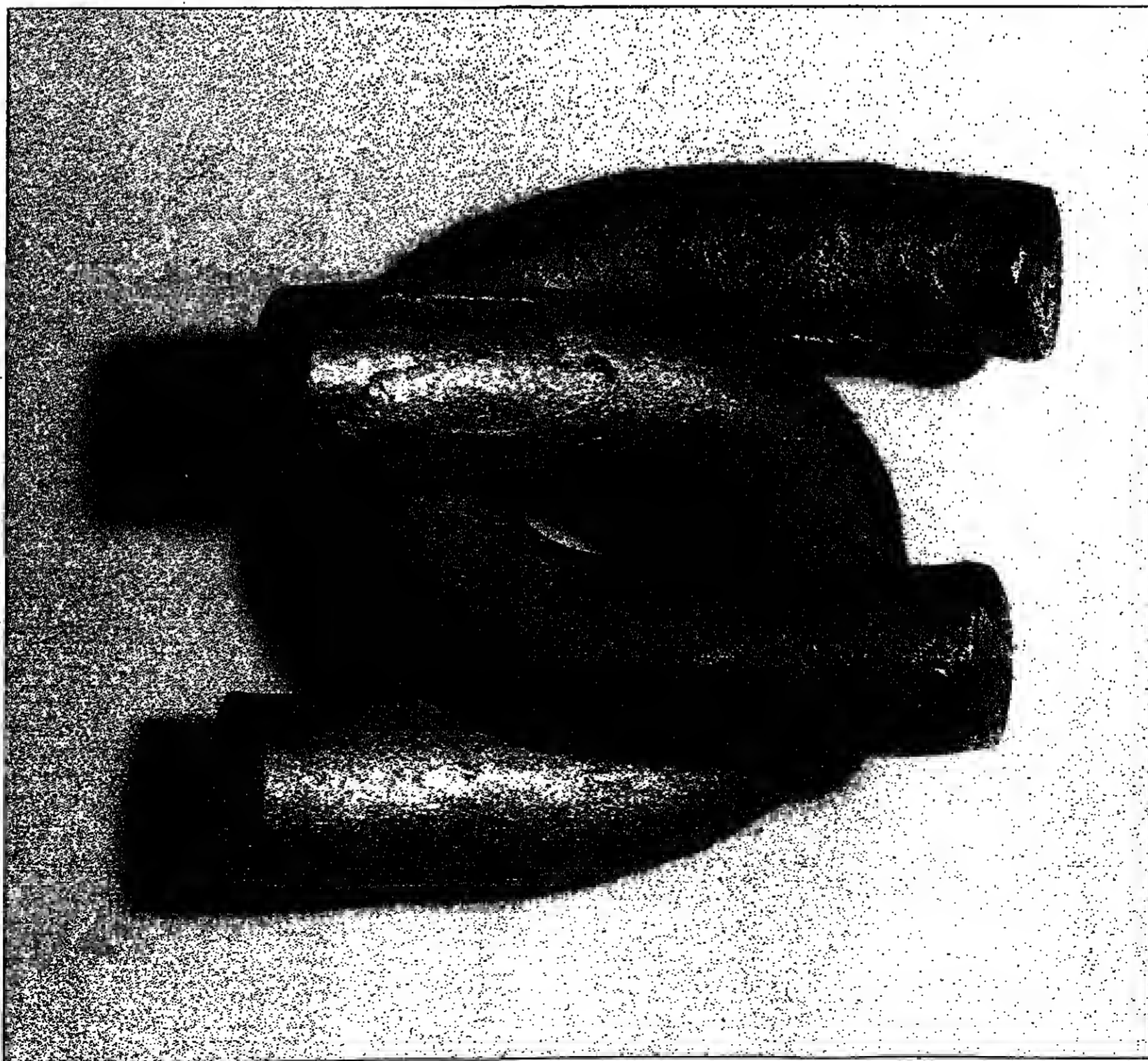
Maybe—since we are a member of the Sampo Group we can offer our clients a comprehensive service, ranging from non-life, life and pension insurances to international reinsurance.

The Sampo companies consist of Sampo Insurance Company Limited, which so far has written mainly non-life insurance, Sampo International Insurance Company Limited, which in conjunction with its British subsidiaries Sampo Insurance Company Limited and Sampo Finlandia Limited writes reinsurance business, and Risk Management Ltd.

Is there anything exceptional about the size of our company?

Probably not—the Sampo companies have 2,200 employees and a turnover of GBP 320,000,000 (1987). Our solidity is, however, remarkable, since the solvency margin exceeds 230% and our net income (31 August, 1988) exceeded GBP 400,000,000.

Why then are we publishing this advertisement? Maybe we just want you to read it and know about us. Moreover it could be good for your business to remember the name Sampo—you never know!



Please return this coupon in a sealed envelope to receive a copy of Sampo's Annual Report 1987 in English. Our address is Sampo Insurance Company Ltd, Information, P.O. Box 347, SF-00101 HELSINKI, FINLAND.

Name: _____

Address: _____

Sampo Insurance Company Ltd
Information
P.O. Box 347
SF-00101 HELSINKI, FINLAND
Telephone: +358 0 132 2212
Telex: +358 0 132 2940

Sampo International Insurance Company Ltd
P.O. Box 216
SF-20101 TURKU, FINLAND
Telephone: +358 21 663 311
Telex: +358 21 665 810

Sampo Insurance Company IUKJ Ltd
Ground Floor
117 Fenchurch Street
LONDON EC3M 5EJ
Telephone: 01 488 2972
01 488 2111



WORLD INDUSTRIAL REVIEW 2

The three major regional markets face a modest decline in demand

Soft landing likely to follow peak in sales

WORLD CAR sales have been on the crest of a wave in 1989, but demand is expected to fall in 1990 from last year's record levels with a modest decline in all three major regional markets of West Europe, North America and Japan.



Kevin Done on this page looks at the motor industry in Europe, the US and South-East Asia

The world motor industry has been enjoying record sales helped by peak demand in West Europe, Japan and the Pacific region and a marked recovery in the US car market. Demand is believed to have grown by around 5 per cent in 1989 to an all-time high of 34.3m units, led by record sales in West Europe which took over from North America as the world's biggest car market in 1987.

West European car sales appear to be at the peak of an unprecedented boom, with record sales reached in each of the last four years. With the exception of West Germany, all the major European volume markets, the UK, France, Italy and Spain, have reached an all-time high in 1989 with Italy exceeding 2m units and Spain exceeding 1m units for the first time.

According to the latest world automotive forecast from DRI, the automotive consultants, the market has peaked, however, and sales in all the major European markets are expected to decline modestly this year, as a result of a slowdown in economic growth and under the impact of high interest rates dampening consumption.

Sales are forecast to decline in West Europe by 5.3 per cent to 12,037m units following an increase of 3.2 per cent in 1988 to a record 12,789m units.

Despite the forecast decline the absolute level of the European market would still be higher than at any time prior to the past two years of record demand, and some leading European car makers expect a very soft landing with a decline of only 2-3 per cent this year.

The US car market has exceeded all expectations in 1989 and showed a rise of more than 3.0 per cent to 10,590m

units, with Ford the biggest winner with a further jump in its US market share to 21.6 per cent from 20.2 per cent a year ago.

General Motors failed in its ambition to arrest totally the sharp decline in its market share, which dropped slightly to just over 36 per cent from 36.5 per cent a year earlier. Its sales volume grew by about 2.5 per cent, however, and the US market leader is confidently forecasting that it will gain market share in both the US car and light truck markets this year.

The DRI report says that US car sales next year will fall by around 4.5 per cent to 10,150m units under the impact of rising interest rates, an upward trend in consumer prices and limited growth in consumer spending.

Some US vehicle manufacturers are content, however, that the combined car and light truck market could again exceed 15m units. This would be the fifth year in succession, and would mark an unprecedented run of strong markets in the US industry.

In the Japanese domestic market, sales have jumped sharply in 1989 and are expected to show an increase of more than 10 per cent to reach a record 3.61m units supported

by strong economic growth and accelerating consumer spending. Here, too, sales are expected

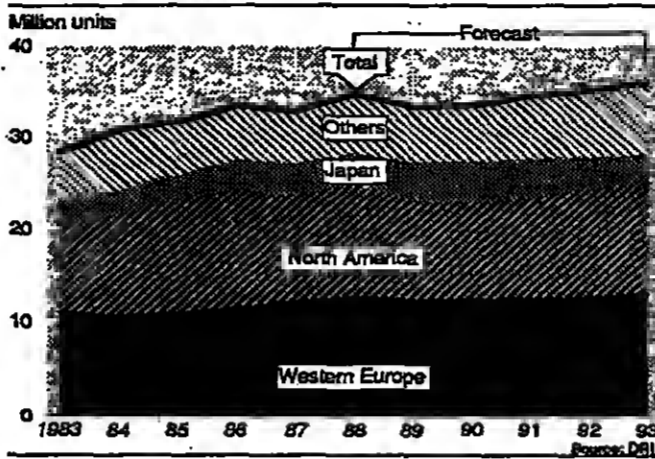
Taiwan and South Korea and is expected to stay on a strong upward trend into the mid-1990s, while sales in Brazil are

'Demand is believed to have grown by around 5 per cent in 1988 to a high of 34.3m units'

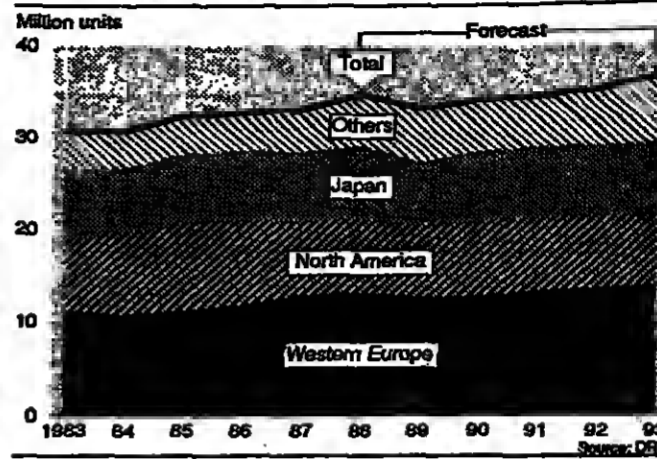
to fall marginally in 1990, however, in the expectation of imminent tax changes, before rising to a new peak in 1990. Car demand is booming in

recovering though still far below the record levels of the early 1980s. DRI estimates that worldwide car production has risen

World car sales



World car production



year. The US now offers a lower cost production base than Japan.

The capacity of Japanese operations in the US which stood at 648,000 units (including the GM-Toyota NUMMI joint venture) in 1987 is set to rise to 2.12m units in 1990 and 2.68m units in 1992. The most aggressive expansion is being made by Honda which should have a US capacity of 700,000 units a year by 1992.

In 1988 Japanese producers began exports from the US to restricted markets like Taiwan and South Korea, as well as to Japan itself, and Europe is expected to become the next target.

At the same time the DRI report forecasts that direct car imports to the US from Japan will decline to around 1.5m units in 1991, equivalent to only 79 per cent of the current 2.3m units 'voluntary export restraint' agreed by Japan with the US.

Car output in South Korea is estimated by DRI to have risen by 12 per cent last year to 866,000 units, an almost sixfold increase in the last five years. The DRI forecast suggests that output will exceed 1m units for the first time this year and South Korea is expected to overtake the UK as a car producer in 1990.

UNITED STATES

More record orders are forecast

THE US auto industry is confidently expecting the boom of the last four years to continue in 1989 with several senior executives forecasting another year of vehicle sales - cars and trucks - in excess of 15m units.

Ford, the world's second largest automotive group which has been enjoying a run of record profits, is the most optimistic. It expects US vehicle sales to reach 15.4m units - 10.2m cars and 5.2m trucks - only a small decline from 1988 sales of 15.5m, the second best year ever.

Last year was the fourth successive year that total industry sales had exceeded 15m units, "an unprecedented mark in the history of the industry," according to Mr Roger Smith, chairman of General Motors, the world's biggest automotive group. "A favourable economy should propel 1989 US vehicle sales to the vicinity of 15m units for the fifth consecutive year," Mr Smith said in Detroit earlier this month.

Following the crisis years at the beginning of the 1980s the industry has recovered strongly.

"It's a tribute to this industry that we began the decade on a very low note with a recession that lasted three years and then proceeded to establish new peaks in the sales of cars and trucks," says Mr Thomas Hanna, president of the Motor Vehicle Manufacturers Association. "The pattern has been set for the 1990s. While the sales graphs will experience upturns and downturns, there is no doubt that fresh records will eclipse even the achievements of this decade."

The best previous sales streak occurred from 1976 to 1978, just before the Iranian hostage crisis. Retail vehicle sales for those years were 13.2m in 1976, 14.8m in 1977 and 15.4m in 1978.

During the boom years of the mid- and late 1980s sales have climbed from 12.3m in 1983 to 14.5m in 1984, 15.7m in 1985, 16.3m in 1986 - the record year - 15.2m in 1987 and 15.5m in 1988.

The 1980s have been particularly marked by the fact that the pickup truck has become fashionable to drive as a passenger car. Nearly 5m trucks were delivered in 1987 with more than 4.6m in the compact and light-duty category. Truck sales set a new record last year at 5.2m units, the fifth consecutive record for light truck deliveries.

Ford's F-Series light-size pickup was the best-selling vehicle - car or truck - in the US last year.

Last year's vehicle sales of 15.5m comprised 10.6m cars and 4.9m trucks, compared with the 1987 totals of 15.2m - 10.3m cars and 4.9m trucks. Sales were strengthened in 1988 by the buoyancy of the general economy but also because various forms of manufacturer and dealer incentives have become a permanent fixture of the US market.

The manufacturer-funded incentives paid off for the big three domestic US vehicle makers in terms of added volumes and higher market share.

Despite sharp losses of car market share in the last couple of years, General Motors still holds a dominant lead with



Mr Roger Smith, chairman of General Motors

35.6 per cent of the overall car and truck market, up slightly from 35.0 per cent in 1987. It gained about two-and-a-half percentage points of the truck market but lost over a third of a point in car market share.

GM has been for many the yardstick of how the US automotive industry could cope with the new challenges springing up in the North American market. The jury is still out on whether the mammoth investments undertaken in the last decade have been enough, but the next two years will see the company unleashing more new products than at any time in its 90-year history. GM has already forecast that it will gain a full percentage point of car and truck market share in 1989.

Mr Robert Stempel, GM president, says that the transformation of its facilities is almost

complete with 8 new and 19 refurbished assembly plants up and running. "I don't think any other manufacturing company has ever undertaken such a massive rebuilding programme. It was costly, but we've convinced it will pay off in the long run." As GM's massive building programme winds down it is devoting an increasing share of its capital spending to product programmes, which will account for about 40 per cent of the total in 1989 and 1988, compared with 34 per cent in 1986.

The biggest winner last year was Ford, which gained just over one percentage point more of the car and truck market to reach 24.2 per cent.

As the US domestic industry - which now includes several Japanese plants - gains momentum it also managed last year to outdo the importers, who actually lost market share in 1988. Imported car sales dropped over the previous year by 2.5 per cent to just over 2m and accounted for nearly 29 per cent of the market compared with almost 31 per cent in 1987. The biggest falls in sales among the importers were recorded by Audi, Porsche and Yugo.

Despite the recovery of the last couple of years, the US auto industry environment today is even more testing than most feared. "Today there are more competitors in the North American market than at any of us ever expected," says Mr Robert Stempel, president of General Motors of the US, the world's biggest automotive concern.

At the beginning of the 1980s the industry was talking about

"world cars", a few vehicles that would be sold in all parts of the globe, and of the likelihood that the number of manufacturers would decrease.

Today 27 major manufacturers produce more than 40 brand names for the US market and, unlike the view in the early 1980s, we now expect more manufacturers, many more, to join us in the world's richest automotive market.

The Japanese automakers are well on their way to establishing a production capacity of more than 2m units a year in North America. Cars began running off the assembly lines at several new Japanese plants last year including the latest, Toyota's \$800m car assembly plant in Georgetown, Kentucky, which will be capable of producing 200,000 units a year by the early 1990s.

The expansion by the Japanese vehicle makers in the US has already entered a new phase as the components suppliers follow the vehicle makers into the market. Most attention has focused previously on the assembly plants themselves, but they are being followed by a wave of suppliers as the Japanese build a replica of their domestic industry in the US. Several engine plants have already been announced.

Toyota has a \$300m engine plant under construction as part of its \$1.1bn complex in Kentucky - and as the necessary volumes are reached transmissions plants will follow.

According to Mr Harold Poling, vice chairman and chief operating officer of Ford, "some 150 Japanese auto parts suppliers are expected to be in the US by 1990."

Exports to the US, which accounted for 49 per cent of Japanese vehicle exports in 1987, totalled some 2.214m units in the fiscal year 1987, the first time that the 2.3m units VEA limiting quota was not reached since it began in 1981.

Exports of completed vehicles from Japan peaked at 6.71m units in 1985, and were followed by a decline of 1.9 per cent in 1986 and a further drop of 4.5 per cent in 1987.

Total output may well have peaked historically last year, too, at around 6m units. According to the latest DRI forecasts, the growing volume of offshore production and the expected softening in world car markets will combine in the short-term to reduce Japanese car production to a little over 7.5m in 1989 and to an average of 7.8m a year during the early 1990s.

Domestic car demand in Japan reached a record of around 3.61m units in 1988. Accelerating consumer spending in Japan appears set to ensure increased demand for cars as well as higher average unit values, which should bolster profits.

With a more liberal tax structure likely to be introduced in 1990, a small decline is expected in domestic registrations in 1989 as consumers defer purchases to benefit from the tax reductions. DRI says that "a new high is expected in 1990, however, as a result of this pent-up demand and of falling real car prices due to lower purchase tax rates."



Nissan in the UK: how free will EC markets be?

WESTERN EUROPE

Mounting challenges

THE unprecedented surge in new car sales since the mid-1980s has established Western Europe as the biggest car market in the world - it took over from North America in 1987.

More cars were sold than ever before in Europe in 1989 and new car registrations reached a record level for the fourth successive year.

According to preliminary estimates, new car sales in Western Europe jumped by 4.6 per cent last year to almost 15m.

Several national markets have set all-time records and new car sales have exceeded 2m units in Italy and 1m units in Spain for the first time.

Most car makers are forecasting that the market will fall back slightly from this exalted peak during 1990, but are seeking to increase capacity, since it appears that the day of national import restrictions are numbered.

According to Mr Daniel Jones, European director, and Mr James Womack, research

director of the International Motor Vehicle Programme, a four-year, 15-country study of the world motor vehicle industry co-ordinated by the Massachusetts Institute of Technology, there is a cause for concern about the competitiveness of the European motor industry in the 1990s.

A worldwide survey of assembly plant performance indicates that the average Japanese plant in Japan can produce a car of comparable complexity and specification with half the human effort (both shop floor and managerial) needed in European-owned plants in Europe. Even this Americans manage to do much better on average and the best American-owned plants in North America are comparable in productivity to the average Japanese plant in Japan.

There is continuing confusion over framing both an external and an internal trade policy for the European motor industry as part of realising the vision of a single market in the 1990s. Tensions exist between those seeking the creation of a "fortress Europe" and those accepting that the battle in tomorrow's motor industry will be fought on a global scale, and that no trade barriers can hope to insulate European producers from the fray.

During the 1990s Europe will have to look, too, at the US as a potential source of a new wave of imports, both from US and Japanese producers, as well as at the rapidly emerging motor industries elsewhere, particularly in South Korea. The potential for trade conflict

is not only with Tokyo, states Mr Jones. "Most crucially, the EC must decide - as a common stance - towards Japanese imports and the removal or easing of the present bilateral restraints which severely restrict Japanese penetration, in particular, of the Italian, French and Spanish vehicle markets."

Linked to this issue is the vexed question of whether Japanese transplant operations in Europe should be subject to minimum local content regulations - the UK and France have already been at loggerheads on this issue over the right of free circulation in EC markets for Nissan's UK-built cars. At the same time, it is far from clear what investment regime will be implemented by Brussels to control the granting of state subsidies to attract the expected surge of Japanese inward investment.

Meanwhile, the battle for leadership of the European market has intensified with Volkswagen of West Germany and Fiat of Italy tying in a virtual dead heat in 1988.

The European car market is dominated by six volume car makers Volkswagen, Fiat, Peugeot, Ford, General Motors (Opel/Vauxhall) and Renault which all have shares of between 10 and 18 per cent. Fiat, already uncontented as Europe's most profitable car maker, was expected to end Volkswagen's three-year leadership of the Western European car sales league, having built up a formidable lead in the early months of the year.

It led all year and was still ahead after the first 11 months, but preliminary industry estimates suggest that it was overtaken by Volkswagen on the final lap, with each selling some 1.52m cars. Fiat's Western European market share of 14.9 per cent.

Behind VW and Fiat lie the French Peugeot group, which includes Citroen, and it is short determinedly giving chase to the leaders. Peugeot produced the best performance of all the volume car makers in Europe last year with an estimated 13 per cent jump in sales volumes to 1.77m units, despite a heavy setback in the West German market.

In 1987 it pushed Ford down into fourth place in the European sales league and last year raised its market share to 12.9 per cent from 12.1 per cent a year earlier. It is planning to increase capacity by 60m, 20 per cent by the early 1990s, and Mr Jacques Calvet, Peugeot chairman, has made no secret of his ambition to secure market leadership by 1992.

The weakest sales performance came from Ford last year, which was hit by a two-week strike at its UK plants in February and suffered a 1.2 per cent fall in European sales volumes.

JAPAN

Moving from volume to quality

THE Japanese automotive industry, now the most export-oriented in the world, has been forced to make fundamental shifts in strategy in the last couple of years.

In response to the severe export conditions brought on by the rapid appreciation of the yen, trade friction with West Europe and the US and the maturing of the domestic market, Japanese vehicle makers have begun to move away rapidly from their previous dependence largely on domestic production and direct exports.

It is forecast that by 1990 Japan's car makers will have around 20 per cent of their annual production located in the US, compared with less than 10 per cent in 1988.

At the same time, Japan, which took over from the US as the world's largest single producer of automobiles in 1980 and has held the position ever since, is placing greater emphasis on domestic demand and is also moving from volume to quality.

In the last three years Japanese vehicle producers have implemented an extraordinary cost-saving programme designed to combat the impact of what, in effect, has been an appreciation of the yen by as much as 90 per cent against the US dollar between September 1985 (the date of the Plaza Accord on exchange rates) and the beginning of 1989.

According to a review published by the Japan Automobile Manufacturers Association, the profits of the 11 Japanese auto makers peaked

in 1985 at ¥1,006.1bn (64.5bn), but fell by 38 per cent a year later to ¥625.4bn under pressure from the rapidly rising yen which squeezed the profits on exports.

The Japanese vehicle producers were forced to raise their dollar-denominated prices - by 30 per cent from autumn 1985 to May 1988 - but, most importantly, the domestic market, Japanese vehicle makers have begun to move away rapidly from their previous dependence largely on domestic production and direct exports.

It is forecast that by 1990 Japan's car makers will have around 20 per cent of their annual production located in the US, compared with less than 10 per cent in 1988.

At the same time, Japan, which took over from the US as the world's largest single producer of automobiles in 1980 and has held the position ever since, is placing greater emphasis on domestic demand and is also moving from volume to quality.

In the last three years Japanese vehicle producers have implemented an extraordinary cost-saving programme designed to combat the impact of what, in effect, has been an appreciation of the yen by as much as 90 per cent against the US dollar between September 1985 (the date of the Plaza Accord on exchange rates) and the beginning of 1989.

According to a review published by the Japan Automobile Manufacturers Association, the profits of the 11 Japanese auto makers peaked

in 1985 at ¥1,006.1bn (64.5bn), but fell by 38 per cent a year later to ¥625.4bn under pressure from the rapidly rising yen which squeezed the profits on exports.

The Japanese vehicle producers were forced to raise their dollar-denominated prices - by 30 per cent from autumn 1985 to May 1988 - but, most importantly, the domestic market, Japanese vehicle makers have begun to move away rapidly from their previous dependence largely on domestic production and direct exports.

It is forecast that by 1990 Japan's car makers will have around 20 per cent of their annual production located in the US, compared with less than 10 per cent in 1988.

At the same time, Japan, which took over from the US as the world's largest single producer of automobiles in 1980 and has held the position ever since, is placing greater emphasis on domestic demand and is also moving from volume to quality.

In the last three years Japanese vehicle producers have implemented an extraordinary cost-saving programme designed to combat the impact of what, in effect, has been an appreciation of the yen by as much as 90 per cent against the US dollar between September 1985 (the date of the Plaza Accord on exchange rates) and the beginning of 1989.

According to a review published by the Japan Automobile Manufacturers Association, the profits of the 11 Japanese auto makers peaked

in 1985 at ¥1,006.1bn (64.5bn), but fell by 38 per cent a year later to ¥625.4bn under pressure from the rapidly rising yen which squeezed the profits on exports.

The Japanese vehicle producers were forced to raise their dollar-denominated prices - by 30 per cent from autumn 1985 to May 1988 - but, most importantly, the domestic market, Japanese vehicle makers have begun to move away rapidly from their previous dependence largely on domestic production and direct exports.

in 1985 at ¥1,006.1bn (64.5bn), but fell by 38 per cent a year later to ¥625.4bn under pressure from the rapidly rising yen which squeezed the profits on exports.

The Japanese vehicle producers were forced to raise their dollar-denominated prices - by 30 per cent from autumn 1985 to May 1988 - but, most importantly, the domestic market, Japanese vehicle makers have begun to move away rapidly from their previous dependence largely on domestic production and direct exports.

It is forecast that by 1990 Japan's car makers will have around 20 per cent of their annual production located in the US, compared with less than 10 per cent in 1988.

At the same time, Japan, which took over from the US as the world's largest single producer of automobiles in 1980 and has held the position ever since, is placing greater emphasis on domestic demand and is also moving from volume to quality.

In the last three years Japanese vehicle producers have implemented an extraordinary cost-saving programme designed to combat the impact of what, in effect, has been an appreciation of the yen by as much as 90 per cent against the US dollar between September 1985 (the date of the Plaza Accord on exchange rates) and the beginning of 1989.

According to a review published by the Japan Automobile Manufacturers Association, the profits of the 11 Japanese auto makers peaked

in 1985 at ¥1,006.1bn (64.5bn), but fell by 38 per cent a year later to ¥625.4bn under pressure from the rapidly rising yen which squeezed the profits on exports.

The Japanese vehicle producers were forced to raise their dollar-denominated prices - by 30 per cent from autumn 1985 to May 1988 - but, most importantly, the domestic market, Japanese vehicle makers have begun to move away rapidly from their previous dependence largely on domestic production and direct exports.

Manufacturers are now placing greater emphasis on meeting domestic demand

operations in the US to otherwise restricted markets in South East Asia such as Taiwan and South Korea, as well as to Japan itself, and it is expected that Japanese-budged exports from the US to West Europe will begin at some stage during the early 1990s.

In contrast to this rapid build-up of Japanese production in the US, direct vehicle exports from Japan to the US are expected to decline to around 1.8m units in 1991, equivalent to only some 79 per cent of the current 2.3m units voluntary restraint agreement (VRA) on Japanese car imports

Handwritten signature or mark at the bottom of the page.

WORLD INDUSTRIAL REVIEW 3

Peter Norman examines prospects for the world economy

Favourable outlook tempered by risks

A SURPRISINGLY buoyant world economy in 1988 has generated hopes that this year will see steady growth with relatively low inflation in the industrialised world.

The Paris-based Organisation for Economic Co-operation and Development, for example, believes that its membership of 24 industrial countries will register real economic growth of 3.25 per cent this year and 3 per cent in 1990 after growing at an unexpectedly strong 4 per cent annual rate since mid-1987.

Although the present economic upswing is over six years old, the OECD believes inflationary pressures can be contained. It projects inflation averaging around 4 per cent this year and next among its members after 3.5 per cent in 1988.

A year ago, anybody suggesting such satisfactory developments in 1988 or such encouraging prospects for 1989 would have been dismissed as a dreamer or a fool. At that time,

1980s; generally moderate wage increases and improved corporate profits in most countries together with a sudden surge in productivity last year combined to produce a world-wide investment boom.

The growth of non-residential private investment accelerated in the OECD countries to around 11 per cent last year from 5 per cent in 1987, providing encouragement that economic growth can continue.

However, the favourable outlook for the world economy is, as always, tempered by risks and uncertainties.

The serious imbalance between the huge US current account balance of payments deficit and the large surpluses of Japan, West Germany and the newly industrialising economies of South East Asia is proving slow to correct. Although strong growth of more than 20 per cent in US export volumes helped out the US current account deficit by more than \$20bn in an estimated \$132bn in 1988, the Japa-

high level of personal and corporate indebtedness in the US, such action could quickly bring growth to an end.

The US itself now counts as an area of risk for the world economy. The US Federal Reserve Board, which has been tightening monetary policy for some months, is carrying the entire burden of curbing inflation. It is still unclear whether the new Bush administration will be able to generate the necessary political will or consensus in Congress to cut the budget deficit.

Although some financial

commentators argue that the US budget deficit can be easily financed, the new US G7 members believe that a cut from the \$155bn deficit recorded in fiscal 1988 is vitally important for the world economy. With chronically low personal savings in the US, the budget deficit provides unneeded stimulus to domestic demand. The emergence of the US as the world's largest debtor nation has acted as a drain on world savings.

Elsewhere, the third world debt crisis rumbles on. Last year brought recognition in the G7 that the most impoverished

African debtor countries would be unable to survive without some form of official debt forgiveness. There is no sign, however, that the major countries will agree to similar assistance for the middle income debtors of Latin America.

While it no longer appears to threaten the world's financial system, the debt crisis inflicts slow growth on parts of the Third World and inevitably limits trade and diminishes global growth prospects.

In the industrial countries, the existence of 28.5bn unem-

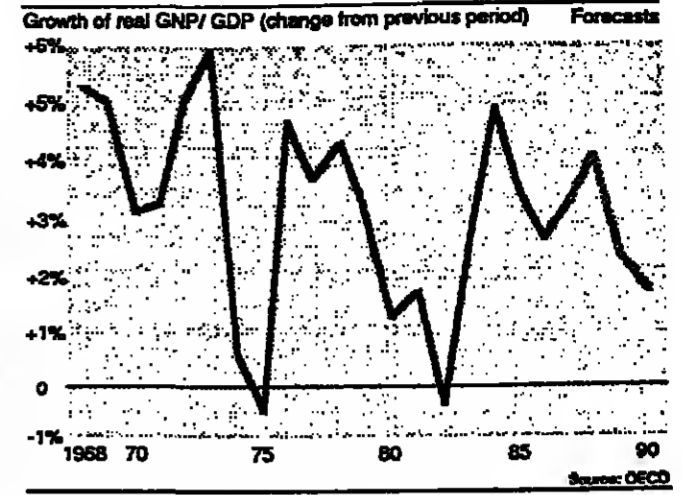
played, of whom around 18.5m are in Europe, shows much must still be done by way of deregulation, general education and vocational training before the benefits of six years of economic growth reach all levels of society.

As 1989 began, a threatened trade war between the US and the European Community over an EC ban on imports of hormone-treated US meat served as a reminder of how fragile are the foundations of continued global economic prosperity.

commentators argue that the US budget deficit can be easily financed, the new US G7 members believe that a cut from the \$155bn deficit recorded in fiscal 1988 is vitally important for the world economy. With chronically low personal savings in the US, the budget deficit provides unneeded stimulus to domestic demand. The emergence of the US as the world's largest debtor nation has acted as a drain on world savings.

Elsewhere, the third world debt crisis rumbles on. Last year brought recognition in the G7 that the most impoverished

Real growth in the OECD



The crash helped pave the way for today's more optimistic outlook. It taught the Group of Seven leading economic powers — the US, Japan, West Germany, France, Britain, Italy and Canada — that economic policy co-operation is essential

the global stock market crash of October, 1987, was fresh in policy makers' memories and many pundits were predicting global recession.

With hindsight, however, the crash helped pave the way for today's more optimistic outlook. It taught the Group of Seven leading economic powers — the US, Japan, West Germany, France, Britain, Italy and Canada — that economic policy co-operation is essential. The prompt decision of the central banks of the G7 and other industrial countries to pump liquidity into the world economy after the crash kept businesses alive and boosted confidence.

That successful crisis management enabled already strong expansionary forces in the world economy to reassert themselves shortly afterwards. The continuing benefits of the 1986 oil price decline increased business confidence from the fall of inflation during the

1980s and West German surpluses have shown few signs of contracting.

Indeed, according to the OECD, West Germany's current account surplus is likely to rise this year to around \$51bn from \$45bn in 1988 because of growing trade surpluses with its European neighbours. Such imbalances carry the ever-present risk in growth of a run on the dollar and turmoil on financial markets.

Inflation, although low by the standards of the 1960s and 1970s, is showing signs of resurgence. Its revival has already prompted a Draconian increase in short-term interest rates in Britain. With virtually full employment and capacity constraints in industry, there are strong fears that US inflation could break out of its present 4 per cent to 4.5 per cent range forcing the US monetary authorities into a drastic tightening of policy. Because of the

THE extraordinary increase in world takeover activity which began to emerge five years ago in the US is showing no signs of abatement. Indeed, the scramble to reorganise several key industries is likely to accelerate over the coming year, driven by factors that go way beyond the asset-stripping moves that first sparked the US merger boom.

Several themes run through this new phase of restructuring.

First, takeovers are increasingly becoming an international issue. European companies, led in particular by UK businesses, have embarked in the last few years on a spending spree in the US. British groups alone spent \$30bn in America last year, according to Mr Mark Dixon, who monitors transatlantic activity in the *British American Review*.

At the same time, cross-frontier mergers in Europe are growing in importance — as, for example, in the international bid battle involving GEC and Plessey in the UK, and Siemens in West Germany. And Japanese companies are beginning to play a role in overseas acquisitions themselves, particularly in the US, where they spent around \$10bn last year.

These purchases are allowing companies to establish stronger international operations in specific fields. Many international groups, such as General Electric in the US, have clearly defined objectives of world market leadership in specific sectors, and are willing to dispose of assets if they cannot achieve that.

Hence Nestlé, the Swiss confectionery and foods company has bought Carnation in the US and Rowntree in the UK; Thomson of France has acquired the RCA television

business in the US to become one of the two leading world producers; and Siemens has just purchased Rolm, one of the biggest US producers of office telephone exchanges, to try and consolidate its strong international position in this sector.

Fourth, companies in mature industries are looking for cost reductions and increased market penetration through rationalisation on an international scale. This process is now well under way in the power engineering industry, where a wave of mergers has swept across Western Europe. It has also emerged in domestic appliances, where the industry in the US and Europe is being concentrated in fewer and fewer hands, and other sectors

Terry Dodsworth on takeover and merger activity

Key industries reorganise

such as mechanical handling equipment.

Fifth, high technology industries are looking for greater international presence as a means both of increasing distribution and of defraying research and development costs.

Research funding is becoming a particularly important issue as the hardware manufacturing element in new equipment declines in proportion to software. Because many products are now software-based, they have also become more amenable to swift changes based on software redesign. Hence product life-cycles are shortening — with a resulting pressure to maximise income from new development swiftly through exploiting the

technological lead internationally.

These pressures lie behind the series of takeovers in the telecommunications field, such as the acquisition by Alcatel of France of ITT's activities in Europe. They have prompted a similar trend in the semiconductor industry — notably the merger of SGS of Italy and Thomson's chip activities in France — and produced several acquisitions in the computer sector.

Finally, the move towards the lowering of trade barriers in Western Europe is beginning to prompt a re-think of the region's industrial structure. Companies that have traditionally had privileged positions in their domestic markets are now jockeying for position as they face the possibility of competition at home and the opportunity of expansion overseas.

This is particularly true in areas of large-scale government procurement such as defence, aerospace and telecommunications. But it is also affecting industries such as computer manufacturing or banking, where governments have historically maintained controls of one sort or another.

All of these trends should continue to be evident in the next 12 months. There is likely to be a particular emphasis, however, on the European element. Companies around the world are beginning to scramble for assets in Europe as they become increasingly convinced

that the European Commission's aim of achieving the internal market by 1992 is backed by a genuine commitment.

One element in this intensification of merger activity will be the movement of more European companies across previously impermeable national boundaries.

French groups, responding to raids in their home market, have begun to show much heightened interest overseas, particularly in West Germany and the UK, where they are aiming to invest in the privatised water companies. German industry is equally on the move, with innumerable small purchases throughout the Continent.

These changes within Europe are likely to be matched by increasing attention from outside as well. Both US and Japanese companies could be beneficiaries of the internal market policy because they already tend to treat Europe as a single large region. But at the same time, they are worried that the lowering of internal European trade barriers could lead to stronger Community-wide position against outsiders. They are therefore under pressure to invest or acquire production activities in the region.

"Japanese companies are faced with a dilemma on acquisition policy," says Mr Dixon. "because they are undecided about whether to concentrate their investment on the US or Europe. The Americans, on the other hand, have a clear view. They cannot acquire in Japan because companies will not sell to them. Hence Europe is a target."

GEC Siemens lifts stake as bid is referred

By Terry Dodsworth, *British American Review*

THE BRITISH GROUP has increased its stake in the German company to 25 per cent. The move is part of a strategy to strengthen GEC's position in the power engineering industry.

Many of two takeover attempts...



The art of being local worldwide.

ABB is the world's leading energy engineering company.

You can find us in 140 countries. We are known for being truly multidomestic.

We have a well-established presence in almost every industrialized country, based on long-standing business partnerships with customers in power generation, transmission and distribution, industrial automation, transportation systems, environmental control, and other related fields. In addition to nationwide sales and service organizations, we have manufacturing facilities in 30 countries.

Although our roots are European, our 180,000 employees are spread worldwide. There are over 30,000 of them serving customers in the Middle East, Africa, Asia and Latin America. Where they are at home, we are at home.

We play an important part in the development of industry and local infrastructure. That means much more than winning contracts. It means being there and knowing a country well. It means investing locally and becoming a part of the community.

If your interests are international, you will find ABB products and services wherever you do business. And you can be confident that ABB has what it takes to stay ahead in industries that compete on global terms.

If your interests are local, then we are right there with you — as insiders.

At ABB, we are local worldwide. And proud of it.

ABB
ASEA BROWN BOVERI

WORLD INDUSTRIAL REVIEW 4

Profound change is most harshly affecting a mature sector

Cheaper solutions hit mainframes

One of British Telecom's new mini-computers. Convergence between telecommunications and data processing will become increasingly common



SLUGGISH GROWTH in mainframes, a fierce battle in the mid-range market and a slowdown in personal computer sales - that is the bleak outlook in 1989 for an industry which is still reluctantly coming to terms with changes more profound than anything it has experienced in the 40 years of its existence.

These changes, driven by the increasing availability of massive computing power at low cost and by unprecedented co-operation between computer manufacturers over common computing standards, are being felt in every part of the industry but most harshly in the mainframe sector. Growth there, at just over 5 per cent a year, is a mere shadow of its former rude state of health, as the sector matures and commercial users find cheaper ways of processing their data using minicomputers, personal computers and workstations.

It would be wrong to infer, however, that the mainframe market is dying. Far from it, there are a substantial number of data processing tasks which are simply not ready to be delegated to microcomputers or super-minicomputers, no matter how powerful.

Furthermore, surveys such as the Price Waterhouse analysis of the opinions of some 2,500 data processing executives in five developed countries, suggest that most companies intend modestly to increase their spending on data processing equipment in 1989, after three years of determined efforts by top management to control computer costs.

Whether existing mainframe vendors will retain their pres-

ent share of the market is another question. International Business Machines still dominates this sector with more than 60 per cent of the mainframe market world-wide, but it now faces new and redoubtable competition from Japanese makers of computers functionally to IBM's and able to run IBM software.

Fujitsu, the leading Japanese "plug compatible" manufac-

turer has now, as a result of arbitration settled late last year, access to sizeable amounts of IBM's operating software.

While a new generation of IBM's largest mainframe family is not expected until 1990, Fujitsu will next year launch new commercial mainframes based on the technology of its VP-2000 supercomputers which should give yet another dra-

matic breakthrough in price performance. There is also the question of how many individual mainframe manufacturers can survive the inevitable pressures for rationalisation as the market matures. Honeywell, for example, is now effectively out of the computer business, having sold at the end of last year much of its stake in the US/French/Japanese manufacturer Honeywell Bull to Groupe Bull of France.

Many argue that NEC's 15 per cent share in the company gives it principally an effective marketing channel to the West for its large machines.

Unisys, product of the merger of Sperry and Burroughs, is looking for fresh acquisitions in its quest to become IBM's principal adversary.

Would NCR, now making a respectable living out of its expertise in financial technology, fit its bill? Or Control Data, which is still grappling with financial difficulties despite a successful new range of supercomputers? The mid-range market, strategically important because of its growth potential, is dominated by a battle for leadership between IBM and Digital Equipment. According to industry experts, this market is set to grow at more than 10 per cent in 1989 through a combination of sales to first-time computer users, small compe-

Alan Cane examines prospects for the computer manufacturers

panies looking for a step up from personal computers and larger organisations centralising computer power.

In simplistic terms, the battle is between DEC's range of compatible, connectable VAX minicomputers and IBM's new and seemingly successful AS/400 systems. In practice, there are a large number of manufacturers in the field any of whom could seize a chunk of the market including Unisys, NCR, Wang and Hewlett Packard.

It is an area where European manufacturers like Norsk Data of Norway, Nixdorf Computer of West Germany and ICL of the UK have in the past successfully maintained niche positions. These companies in 1989 came under considerable pressure, however. Nixdorf, for example, plans to eliminate 1,600 jobs or 5 per cent of its workforce by the end of this year to cut costs and improve

profitability. Nixdorf chairman, Mr Klaus Luft, blamed intense price competition and a cutback in spending by financial institutions.

Last year was characterised by a series of very public battles between on the one hand, IBM and a sometimes surprising set of supporters and on the other, the rest of the industry. There seems no likelihood of a quick end to hostilities.

The differences between super-minicomputers and mid-range machines, for example, have largely been buried in an industry-wide argument about the best operating software to run on such machines. Everybody agrees, on the surface at any rate, that customers, manufacturers and software developers alike would benefit from common, industry standard operating software.

Most agree that Unix, developed originally by AT&T, is the best choice. But which version of Unix? AT&T and a group of manufacturers including Sun Microsystems, the most aggressive of the super-minicomputer vendors, believe AT&T's version should become the standard.

The Open Software Founda-

IBM is still without much support from its competitors for its new MicroChannel Architecture (MCA), a design of microcomputer which exploits the power of the latest chips, but which does not allow customers to run their old personal computer software.

This year will see the emergence of EISA (extended industry standard architecture), an alternative design created by a manufacturers' lobby led by Compaq of the US. This design, said to give all the advantages of MCA without incompatibility problems, may simply arrive too late to hurt IBM.

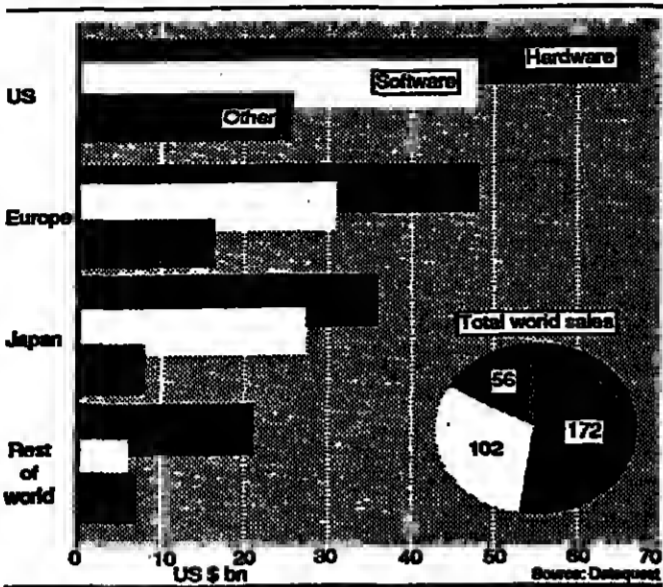
While personal computer sales are expected to sag somewhat in 1989 after some years of powerful growth, there is still expected to be a healthy market for industry-standard personal computers, especially those using the latest 32-bit

chips. There will continue to be fierce price competition with companies like the British-based US manufacturer Everest setting the pace. US securities house, Goldman Sachs, notes: "With nearly 250 in-house engineers focused in new product development and manufacturing, Everest designs cost out of its products."

"Prices for its products are 50 per cent below the list prices of its competitors. The company's direct distribution and low-cost design and manufacturing enable it to be so aggressive."

The mainframe market may be close to full maturity; the personal computer market is clearly scarcely out of its infancy. Managing Information Technology International Survey, 1989, available from: Price Waterhouse, 1, London Bridge, London, SE1 9QL.

Information technology spending



THE COMPUTING services business world-wide is distinguished by the fact that in spite of its age - 25 years by most reckonings - and the vigorous nature of its development, it is only beginning to show the conventional signs of industrial maturity.

These include moves towards rationalisation among the thousands of tiny companies which constitute the industry, a growing desire for professionalisation and the emergence of a few companies which might become market leaders in an industry without real leadership.

And all of this coupled with a potential for growth which seems unlikely to drop below 20 per cent a year for the foreseeable future.

There are several reasons for the industry's refusal, so far, to develop out of its prolonged adolescence but a major factor is the way in which it comprises a heterogeneous group of companies and businesses rather than a single entity. It follows that to analyse prospects for the sector as a whole means looking closely at each business area.

The software industry has a peculiarity which renders analysis difficult, for it is really three separate markets. Many of the millions of lines of software written each year are developed by computer manufacturers for the express purpose of running and servicing their own machines. So that is one area closed to independent producers. Another no-go area is that catered for by corporations' own data processing departments.

The rest of the market is open to independent software houses, but even then they are constrained by the business strategies of the hardware vendors.

Last year, for example, Management Science America (MSA) a leading US-based software house, selling business software, announced a major commitment to converting its entire family of financial and

SOFTWARE

Moves to rationalise



Growth is likely to continue at 20 per cent a year, writes Alan Cane

manufacturing programs to run under International Business Machines' Systems Applications Architecture (SAA), a set of rules and regulations devised by IBM to ensure that the computers in its three main product areas - mainframes, midrange and personal computers - have a similar "look and feel" to users and to programmers developing software for them.

MSA is not the only software vendor to have made such a commitment - indeed, most independent software vendors will have to make the change to SAA compatibility if they wish to retain sales in the all-important IBM environment, but it seems to have moved faster than others in producing deliverable products.

There is often a substantial difference, in the software world, between what is promised and what is delivered. This year will be, for example, something of a year of truth for Lotus Development Corporation whose spreadsheet '1-2-3' habitually tops the applications software best sellers list, but which has uncharacteristically fallen rather more than a

SEMICONDUCTORS

Signs of a slow-down



Louise Kehoe reviews the semiconductor industry's year and looks ahead

THE LAST year was a boom year for manufacturers of semiconductor chips, with world-wide market growth of over 30 per cent boosting sales to over \$50bn. In this highly cyclical industry, however, the good times seldom last for long and already there are some signs of a slow-down in the year ahead.

Projecting the outlook for the semiconductor industry in 1989 is, however, a task fraught with problems. Never before in the 25 year history of the semiconductor industry have so many uncertainties fogged the future.

External economic factors could have a major impact upon the industry's performance. With Japanese manufacturers now controlling over 50 per cent of the world semiconductor market, the value of the yen relative to other currencies, for example, significantly affects US and European measures of market growth.

With the trade and economic policies of the new US administration still to emerge, semiconductor manufacturers, like many industrialists, are maintaining a cautious approach to business projections.

Trade issues, including the ongoing battle over semiconductor trade between the US and Japan, which has led to government intervention in the memory chip market, could again loom large in 1989 as the US continues to push for greater access to the Japanese semiconductor market.

According to analysts at Dataquest, the US-based market research firm, US semiconductor producers' sales accounted for 10 per cent of the total Japanese semiconductor market in 1988, the highest portion of market share recorded since 1984. US industry leaders and government officials remain concerned, however, that the increase represents only "residual" sales, won in a period of high demand, that may disappear if demand softens. Any significant drop in the foreign

share of the Japanese chip market in 1989 would spark increased trade tension and might lead to further trade sanctions.

Japanese semiconductor producers are also increasingly concerned about potential trade problems in Europe, where demands for higher "local content" in electronic equipment by the Economic Community may significantly affect sales over the next few years.

Within the industry, several major issues are also creating uncertainty. Shortages of key products such as memory chips and microprocessors, leading to higher prices, were a major contributing factor to the 1988 boom. According to analysts at In-Stat, an Arizona market research group, growth in unit sales, or real demand, was up only 17.5 per cent last year, with the remainder of the dollar growth directly attributable to shortage-related price increases.

A critical question facing the industry today is how long these shortages will last. While some market analysts are already reporting an easing of the shortages, major Japanese

producers say they expect memory chips to be in short supply throughout 1989.

Toshiba, the largest producer of Dynamic Random Access Memory (DRAM) chips, believes that increased demand from new markets such as High Definition Television will stretch the DRAM shortage out for at least another year.

Others maintain, however, that production expansion at several Japanese, Korean and US memory chip manufacturers, could soon begin to ease the shortage of DRAMs, which has plagued the electronics and computer industries for the past 18 months.

"The value of memory chip sales rose by an unprecedented 91 per cent in 1988, according to Dataquest estimates, so any change in DRAM supplies

Shortages of key products such as memory chips were a major contributing factor to the 1988 boom

could have a radical impact upon semiconductor market growth as a whole.

Increased manufacturing capacity at Intel, in the US, should also prevent a recurrence of the shortage of high performance microprocessors that has affected personal computer manufacturers in recent months, easing prices

It is, however, as always, the pattern of demand that will set the trend for world-wide semiconductor sales in 1989. The consensus among industry leaders and market analysts is that moderating growth rates in major end-user markets, combined with lower memory chip prices will make 1989 a "no growth" year in the world semiconductor market.

In the US and Asian markets (excluding Japan) there have been some signs of a slow-down during the fourth quarter of 1988 with chip makers reporting softening demand from some personal computer manufacturers as well as lower orders from semiconductor distributors. The US market is expected to shrink by 1-1.5 per cent this year.

In Japan, where over 50 per cent of semiconductor sales go into consumer electronics products, increased competition from lower-cost producers of television, video tape recorders and other popular products elsewhere in Asia may temper semiconductor market growth in the year ahead, according to industry analysts. Growth will be reduced to about 2-3 per cent in 1989, according to market research firms.

The European semiconductor market, which has been driven by the demands of telecommunication equipment manufacturers as well as the military and computer sectors, is also slowing down, with little or no growth expected this year.

Emerging semiconductor producing nations such as Korea and Taiwan, will also see sales growth slow to a trickle in 1989 as prices for "commodity" chips fall, industry projections suggest.

Despite such projections, major chip makers around the world remain cautiously optimistic about the outlook for 1989. While there may be a slow year ahead, it now seems unlikely that the industry is heading into a major recession like that of the mid-1980s.

much worse had it not been for weather factors which gave air conditioners an 11 per cent boost.

Shipments of cooking appliances, the biggest single sector in the US market, fell by almost 12 per cent. A 15 per cent drop in sales of microwave ovens showed quite clearly both that the market is saturated and that efforts to expand sales by the introduction of combination conventional/microwave appliances are flagging.

Suppliers to the British market, the most important export outlet for continental European makers, are facing a tricky time after two excellent years during which sales rose strongly. As interest and home loan rate increases take their toll on discretionary spending power, sales of white goods are traditionally among the first to suffer. There are already signs in the heavily concentrated retail trade - where the top 20 chains control 50 per cent of sales - of price cuts eating away at margins.

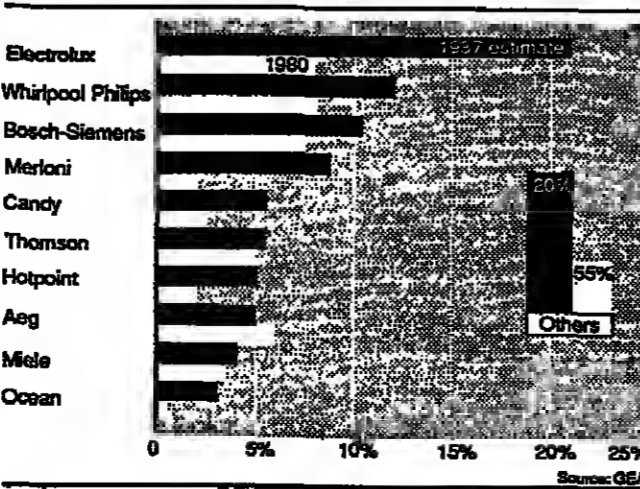
In the more stable environment of West Germany, prospects are that growth running at around 8 per cent by value for the past two years will continue, although the pace may slacken.

Japanese makers, struggling with the strong yen and high labour costs, have already detected a trickle of competitively priced imports into their home markets. According to Mr Akira Koudate, a director of the joint Italian-Japanese consultancy, Jmac-Consolid, retailers are bringing in European and US refrigerators, and

calling in international components procurement and Matsushita is planning a similar project in West Germany, Mr Koudate told a seminar in London recently.

However, as the seminar, organised by Indesit and Ariston maker Merloni Elettrodomestici, was told, the industry leaders in Europe have been moving even more briskly to squeeze out maximum efficiencies from their international networks. Sweden's Electrolux, for example, which was topped from its position as the world's biggest appliance maker last year by the link

European market share



DOMESTIC APPLIANCES

Diversity of demand

between Whirlpool of the US and the Dutch multinational, Philips, has led a quiet revolution in components, buying parts makers across the world. That is now being mirrored in the electric motor industry and among specialist electronic controls makers.

Although less dramatic than the continuing round of mergers in branded appliance makers proper, this further

concentration of manufacturing power and consequent cost efficiencies could be of equal significance for white goods companies which have so far escaped the takeover net.

However, there are those who argue that scale counts for relatively little in an international market place with such diverse tastes as Europe, and that the profits advantage lies with nationally-based specialists which concentrate on their home markets. A recent study from the London Business School pointed, for example, to the superior performance of Britain's Hotpoint,

the GEC subsidiary, arguing that the complexity involved in manufacturing many varieties of machine for a dozen countries and more overwhelmed the potential for economies of scale. Smaller, more flexible factories were ultimately more efficient.

Hotpoint's estimated 10 per cent return on sales from a mere 5 per cent share of the European market in 1987 compares favourably with Electrolux's 6.4 per cent from a market share approximating 25 per cent. However, Thomson, France, another national manufacturer - operating in a protected environment - managed a return of only 4.7 per cent.

The results of Electrolux's international adventures have yet to show up clearly. The Philips/Whirlpool deal is only just under way. The assimilation and management of diverse companies around the world is necessarily a protracted task, not helped by the peculiar difficulties facing white goods makers. But the fact that the Swedish group managed to maintain an even keel last year, helped by buoyancy in Europe to overcome the US slump and some local difficulties with US manufacturing operations, suggests that internationalisation has its merits.

Recent events, including the proposed merger of the European appliance interests of Britain's GEC and General Electric of the US, last year's Whirlpool/Philips link, and the purchase of Hoover by Maytag of the US, suggest that the world's major appliance makers are already reporting an easing of the shortages, major Japanese

Merloni meeting that Europe's national and niche market specialists like Miele of West Germany, were strong and defending themselves well.

Even so, he suggested rationalisation would continue.

The national leaders might link through joint ventures.

They might enter international markets by taking over another one, although Electrolux and Philips are likely to run into national or European Community monopolies controls.

General Electric of the US might join the bidding at last.

Events have proved him partly right. However, as Prof Joseph Power of the Harvard Business School told the meeting, GE should first be sure of the wisdom of such a move, as well as confronting the diversity of tastes it would meet in Europe, it would have to learn to deal with a highly-fragmented distribution network which might be just as great an obstacle to pan-European success.



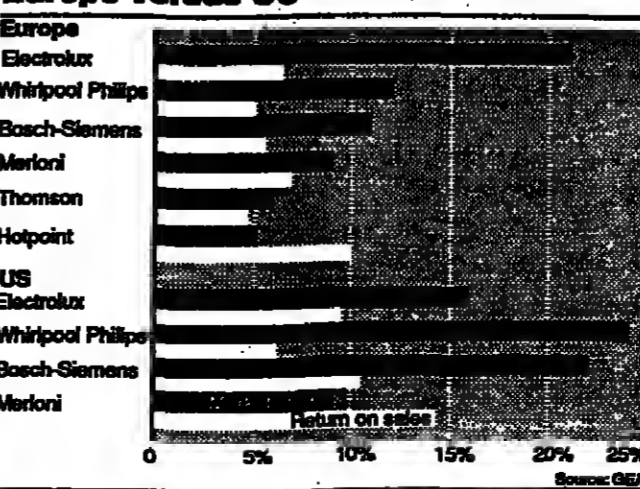
The globalisation of domestic appliance manufacturing is hitting some immovable obstacles, writes Christopher Parkes, as well as economic volatility and saturation

HOWEVER irresistible the forces of globalisation may seem in the kitchen appliance manufacturing industry, there is no evidence yet that they have found a way round or through the immovable obstacles of diversity of taste and demand which hamper the internationalisation of markets.

Difficulties are compounded by saturation, the lack of innovation to prompt purchase, and economic volatility which usually entails appliance sales taking a knock with every downward twitch in the barometers of prosperity.

In the US, for example, factory shipments of white goods fell last year. Following a long-established pattern in which a fall in new housing starts presages a drop in sales, sales of all domestic appliances declined by 2 per cent to 42.6m units in the first eight months of 1988. The figures would have been

Europe versus US



How long will the good times last?

Surge in demand sees record profits

MANY of the world's big chemicals companies are breathing a sigh of relief that events over the past year or so have gone so well for them. Equally, they are crossing their fingers and hoping that 1989 and 1990 will turn out the same.

Across much of the world the chemicals sector in the early 1980s was locked upon as a business in decline. It was beset by problems of overcapacity and insufficient demand, a situation not helped by the successive rises in the price of oil that is the main feedstock for many basic chemicals.



Peter Marsh on one of the world's biggest manufacturing businesses

Over the past year, the big chemicals groups in the US, Japan and Europe have started to benefit from these changes, showing record profits as a result of surging demand and high prices in many product lines. The growth has come equally from high volume, relatively low-price plastics such as polyethylene and polystyrene and also from newer, higher-value chemical products like pharmaceuticals, engineering plastics and agricultural compounds.

The big question now for the industry - which is dominated by a few dozen giant multinationals but includes countless thousands small producers and

fabricators in many different specialised niches - is how long the good times are likely to last.

Mr Enrique Falla, chief financial officer of Dow Chemical, the second biggest US chemicals company, believes the bright prospects for the industry will continue for at least another year - though after that the outlook becomes more uncertain due to the hazards of forecasting demand. Dow, with sales in 1988 of about \$16bn, is the world's sixth biggest chemicals group, behind BASF - Bayer and Hoechst of West Germany, Britain's ICI and the US Du Pont. In seventh position is Ciba-Geigy of Switzerland.

Underlying the discussion about the sector's prospects over the next few years are the structural changes affecting the industry. There has been a move within individual companies both towards greater specialisation of products and also to targeting more of the industry's output to areas like pharmaceuticals and agricultural chemicals which are only slightly affected by perturbations in the world's industrial cycle.

On top of this has been a greater accent among the world's top chemicals companies on new products which are based on a significant degree of scientific research and which can be sold for higher prices than older-established products such as basic plastics, fibres, paints and dyes.

Examples of these changes have been the efforts by many of the big companies to move into high-performance plastics for car and aerospace applications. Fibres makers, too, are moving more of their efforts to designing novel, high-strength materials for engineering applications - in contrast to the traditional customer base for the products in the clothing area.

According to Mr John Garcia, a chemicals-industry analyst at Wertheim Schroder, a New York investment bank, many of the world's big chemicals companies have a common aim to build up scientific expertise in key areas such as biotechnology and engineering. These core technologies can then be "leveraged" into a variety of product areas including drugs and crop-protection materials as well as many variants of the basic industrial chemicals sold today.

Driving these moves is that in most developed nations about half the output from chemicals companies goes directly to other manufacturing industries, which are themselves directly linked to the peaks and falls in the world's economy.

Anything that lessens the sector's dependence on this cycle - and so smooths out the fluctuations in demand from which the chemicals business has suffered over the past 30 years - will, from the industry's viewpoint, be a substantial gain.

Another factor is the tougher competition in many areas of chemicals - textile fibres and petrochemical feedstocks such as ethylene are good examples - from newly industrialising nations and the oil-rich countries of the Middle East. Faced with the threat of these countries gaining solid positions in the traditional areas of basic chemicals, companies from the richer countries have been forced to go up market in their product strategies if they want to be sure of a reasonably prosperous future.

FEW industries present so many paradoxical faces as the global pharmaceutical business. The sector, with world sales of about \$100bn annually, is dominated by 20 or so multinational companies which are admired by many industrial onlookers for their ability to turn new scientific ideas into money spinning products.

On a public front, however, the business attracts very little in the way of esteem. The sector hardly ever wins much praise from the average consumer, even when a medicine is helping to improve health - in which case the person who probably thank the doctor rather than the drug's maker.

Relations between the industry and governments, meanwhile, are coloured by the fact that in most developed countries the biggest customers for drugs are public-owned health agencies anxious to keep down costs. As a result, governments often view the sector in adversarial terms.

While defence is another industry which is highly dependent on government for sales, in most industrialised countries the drugs business has had far less success than the military in cajoling politicians to take supportive measures.

The drugs sector is unusual in the large sums it spends on research and development - often in the region of 10-15 per cent of sales. That ratio applies to all the world's top drugs companies of which the US Merck, with sales in 1987 of \$4.2bn, is by some distance the biggest. Next in the league table are Hoechst of West Germany, Britain's Glaxo, Sweden's Ciba-Geigy, Bayer of West Germany and the US

American Home Products.

Much of this R&D cash is taken up in lengthy trials, which frequently last a decade, during which new drugs are tested on selected patients before they are released for general distribution under a doctor's prescription.

A frequent complaint in the healthcare business is the increasing weight of registration procedures insisted on by governments before a new drug can enter the market. These procedures, intended to ensure that the medicine is both safe and works as advertised, can add several years to the development times for new pharmaceuticals and lead to still greater R&D expenditure.

The subject of the high R&D costs can, however, be interpreted in several ways. While many in the drugs sector say the high research costs are a large and unfair burden on the industry, other onlookers believe that at least some of the R&D cash ought to be more rigorously categorised as marketing expenditure.

According to this view, much of the cash that a company spends on a drug during the trials procedure is essentially promoting the product among the doctors whom the company hopes will prescribe

the product in large quantities once it reaches the market. Another school of thought is that not all the R&D costs associated with many drugs companies may be strictly necessary. The expenditures have been rising rapidly in recent years; to some degree this is because of tougher government regulations on registration but it is impossible to escape the thought that much of the research conducted by drugs companies may be ill-conceived and therefore wasteful. That could, at least to some degree, explain why the R&D costs for drugs companies are substantially higher than in many other equally innovative sectors - in electronics for example.

Certainly many pharmaceutical companies are investigating new ways to speed up their development programmes to reduce costs, either by techniques to tailor new drugs to combat specific physical conditions (new scientific methods of protein engineering and genetic manipulation may help here); or by improved computerised procedures to keep track of the masses of data generated during drugs trials.

One undoubted big opportunity for the industry over the next few years arises from the demographic changes that are

PHARMACEUTICALS

Some favourable trends, though dissatisfaction with public policy



The pharmaceutical sector presents many paradoxes, writes Peter Marsh

the product in large quantities once it reaches the market.

Another school of thought is that not all the R&D costs associated with many drugs companies may be strictly necessary. The expenditures have been rising rapidly in recent years; to some degree this is because of tougher government regulations on registration but it is impossible to escape the thought that much of the research conducted by drugs companies may be ill-conceived and therefore wasteful. That could, at least to some degree, explain why the R&D costs for drugs companies are substantially higher than in many other equally innovative sectors - in electronics for example.

Certainly many pharmaceutical companies are investigating new ways to speed up their development programmes to reduce costs, either by techniques to tailor new drugs to combat specific physical conditions (new scientific methods of protein engineering and genetic manipulation may help here); or by improved computerised procedures to keep track of the masses of data generated during drugs trials.

One undoubted big opportunity for the industry over the next few years arises from the demographic changes that are

increasing the proportions of elderly people in the populations of many countries. That creates a huge and increasing market for medications to combat many of the diseases that afflict people later in life - cancer and heart ailments for example. At the same time, new scientific advances in understanding how the body works may make it easier to come up with novel, and possibly highly profitable, treatments for illnesses such as mental disorders where current therapeutic methods leave a lot to be desired and which also afflict many elderly people.

In opposition to such generally favourable trends are, however, other factors which - certainly in the opinion of many in the drugs business - are acting against the interests of the industry. Drug companies often also complain about a host of problems that stem from public policy decisions - including the issue of the tougher registration procedures - that they say are hindering the progress of the industry.

This element of dissatisfaction was underlined in a report last year by Merck, the world's number one drugs company. Clearly adopting the approach that the time to change things is when you are ahead, Merck took 71 pages to list a number of issues - ranging from lack of patent protection for new drugs to insufficient government cash going into science education - that the company believes is causing difficulties both for itself and for other US companies in the healthcare field.

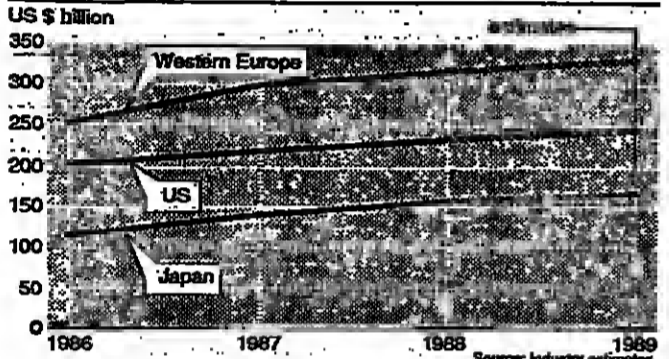
The company's basic message, which observers of the drugs industry find it difficult to argue with, is that government policy actions over the next few years will have a big impact on the degree to which the business prospers.

Health Care in Innovation: The Case for a Favourable Public Policy, available from Public Affairs Office, Merck, PO Box 2000, Rahway, New Jersey 07065, US.

Rank	Company (Country)	Sales (\$bn)
1	Merck & Co (US)	4.2
2	Hoechst (W. Ger)	3.5
3	Glaxo (UK)	3.4
4	Ciba-Geigy (Sw)	3.2
5	Bayer (US)	3.0
6	American Home Products (US)	2.9
7	Takeda (Jap)	2.7
8	Sandoz (Sw)	2.7
9	Eli Lilly (US)	2.4
10	Abbott (US)	2.3
11	Pfizer (US)	2.3
12	Warner-Lambert (US)	2.3
13	Bristol-Myers (US)	2.2
14	SmithKline (US)	2.2
15	Roche (Sw)	2.1

* Figures are for the year ended December 1987, except Glaxo (June 1988) and Takeda (March 1988).
 ** Sales conversions are based on average annual exchange rates for 1987.
 Source: Scrip World Pharmaceutical News.

Chemical industry output



TOP CHEMICAL COMPANIES (1987 sales)

Company	Sales (\$bn)	% Change
BASF (W. Germany)	25.6	-0.6
Bayer (W. Germany)	23.7	-3.0
Hoechst (W. Germany)	23.6	+11.2
ICI (UK)	21.9	+0.7
Du Pont (US)	17.5	+11.2
Dow Chemical (US)	13.4	+20.4
Ciba-Geigy (Switz)	12.4	-1.2
Montedison (Italy)	11.9	+7.5
Shell (Anglo-Dutch)	11.7	+6.4
Rhône-Poulenc (Fr)	10.6	+8.8
Akzo (Holland)	8.8	-0.5
Mitsubishi, Kasai (Jap)	8.0	-0.1
Eli Lilly (US)	8.0	+9.1
Montedison (US)	7.9	+11.1
Esxon (US)	7.2	+18.1
Sandoz (Switz)	7.1	+7.4
Unilever (Netherlands)	6.8	+9.0
Solvay (Belg)	6.8	+3.4
Hottelmann-La Roche (Switz)	6.1	-1.5
EniChem (Italy)	6.1	+3.3
Norsk Hydro (Norway)	5.3	+3.0
DSM (Holland)	5.1	-0.2
Merck & Co (US)	5.1	+22.6
Pfizer (US)	4.9	+9.9
BP (UK)	4.6	+13.5
Showa Denko (Jap)	4.5	+11.1
Grace, WR (US)	4.5	+21.2
Aschem (France)	4.4	+22.6
L'Air Liquide (France)	4.4	+11.9
Sumitomo (Jap)	4.3	+0.2
Cyanamid (US)	4.2	+9.2
Asahi Chemical (Jap)	3.8	+7.8
BOC (UK)	3.8	-0.6
Colf Chimie (France)	3.8	-1.7
L'Oréal (Fr)	3.6	+9.7
Mitsui Toatsu (Jap)	3.5	+4.4
HGis (W. Germany)	3.5	+0.6
Arcochem (US)	3.5	+19.3
Schering (US)	3.0	+0.6
Occidental (US)	3.0	+43.2
Mobil (US)	2.9	+22.4
Allied Signal (US)	2.8	+11.9
PPG (US)	2.8	+6.4
Quantum (US)	2.8	+48.4
Unilever (Anglo-Dutch)	2.8	+1.1
Mitsubishi Petrochem (Jap)	2.4	+5.4
Eastman Kodak (US)	2.4	+10.0
Chevron (US)	2.4	+18.8
Rochem & Huls (US)	2.2	+5.5
Average	6.8	

US motor industry

Continued from page 2

companies are producing goods in the US today, about three times the number in January 1984. And many industry analysts have estimated that the number could grow to 300 by 1990.

Mr Polling suggests that planned additions to capacity, particularly Japanese plants in North America and Europe as well as new Korean plants, are expected to result in excess world-wide automotive capacity of some 9m units by 1990 - over 20 per cent more cars and trucks than consumers will demand.

"Overcapacity of this magnitude means we will be facing a brutally competitive environment world-wide," says Mr Polling.

"It means there will be many factories today that will not be able to survive to the end of the century - if that long - in their present sizes and structures. And the impact will be felt most severely in North America where nearly 6m units of that excess will be aimed."

This year marks a new phase in the expansion of the Japanese auto industry world-wide, but particularly in North America, as Toyota and Nissan storm the last bastion left

unconquered during the last two decades of their unprecedented invasion of world car markets - the rarified market of high performance luxury cars.

Heretofore, the exclusive club of European luxury car makers led by the West German trio of Daimler-Benz, BMW and Porsche, and Jaguar of the UK, have had the market to themselves, confident that the prestige and heritage of their marques could hold them above the fray.

Now even that seemingly impregnable part of the old order is changing. For Mr Tom Mignone, executive vice president of Nissan Motor Corporation in the US, and a master of motor industry hype, the significance of this month's launch of Nissan's and Toyota's new luxury car lines is simple. "Every few decades a major business development occurs that sets a new direction for the industry. It marks a departure from business as usual." In this particular case it is simply "the end of the luxury car market as previously known".

Each company has spent several billion dollars in the last five years on producing new flagship cars - for Nissan the

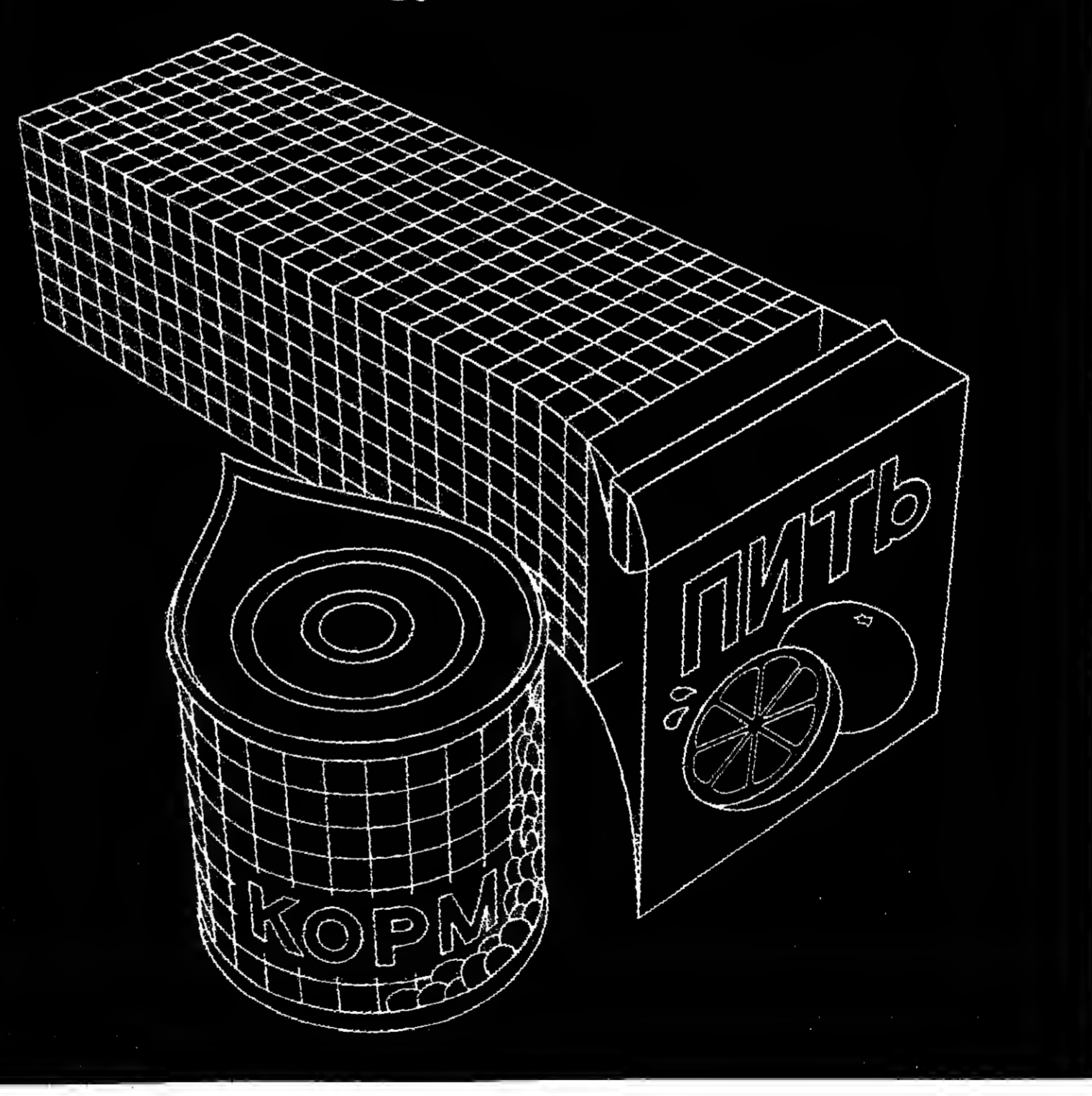
Infiniti Q45 and for Toyota the Lexus LS 400 - that are supposed to show all the best the Japanese can now achieve in car technology, performance and design.

Mr Jim Parkins, manager of Toyota's Lexus division, says that currency movements and the Europeans' pricing policy mean that there is now "an opportunity that didn't exist even a year ago in the mid-priced luxury market". The Japanese push into the luxury market has been encouraged by much more fundamental factors, however, most importantly the growth they expect to come in the overall luxury car market as the population bulge moves upwards and the baby boomers move into their prime earning years.

"The number of households with annual incomes over \$50,000 will increase from 10 to 19 million over the next five years," he says. When they were young many of the baby boomers bought the smaller Japanese cars as first time buyers. Now Nissan, Toyota and Honda are determined to have a slice of their business as they reach affluent middle age.

Kevin Done

Our technology knows no frontiers.



APV is the undisputed leader in supplying production line machinery and equipment to the food and drink industries - worldwide. Furthermore, we believe that the current programme of perestroika in the Soviet Union presents us with significant additional opportunities. And we have already established a fully staffed office in Moscow. Our experience in the food and drink industries is comprehensive. From biscuit and bread baking to chocolate and confectionery making. From cereals and snacks to dairy, brewing and soft drinks. From initial ingredient specification to final packaging. We also have a unique combination of process knowledge and engineering design skills. And we can take responsibility for entire production lines - including computerised controls where necessary. For more information please contact us at the address below.

World leaders in process technology.

APV plc, 2 Lygon Place, London SW1W 0JR. Tel: 01-730 7244, Telex: 825405, Fax: 01-730 2660.

WORLD INDUSTRIAL REVIEW 6

The first half of 1989, at least, looks healthy

Consumption is a barometer



Nick Garnett, here and right, reviews the bumper year of 1988 and looks at the year ahead for the steel industry

After a year of booming consumption, the world's steel makers are now wondering whether 1988 marked the peak of the business cycle.

Predicting future trends in steel demand is so problematic that just about everyone trying it has made howlers of epic proportions.

In the early 1970s, the general consensus was that steel was on a long upward curve that would take yearly demand steadily up to about 1.7bn tonnes by the end of the century.

Apparent consumption of crude steel peaked at 733,000 tonnes in 1979 before sliding to 655,000 in 1982, climbing back up to 741,000 in 1987.

Last year the steel industry enjoyed exceptionally strong demand as a whole raft of industries, from vehicle building to mechanical engineering, experienced powerful surges in ordering.

'Just about everyone who tries to predict future trends in steel demand makes howlers of epic proportions'

According to estimates prepared in September by the International Iron and Steel Institute (IISI) consumption among the 12 European Community countries looked like increasing for the full year of 1988 by about 7 per cent to 111m tonnes.

course for a rise of 4 per cent to 110m tonnes and Japan by 13 per cent to 97m tonnes. The IISI as industrialised appeared to be on course for an overall increase in steel consumption in 1988 of almost 8 per cent to 361m tonnes.

The Japanese figure also reflected an especially powerful surge in the usage of steel in Asia as a whole. So-called developing countries in Asia experienced an increase in steel consumption last year of more than 10 per cent, from 57m to 62m tonnes.

Steel consumption is a barometer of industrial demand and general economic health. As a result it is easy to see why demand in the past has oscillated the way it has done but it is very difficult to predict future trends.

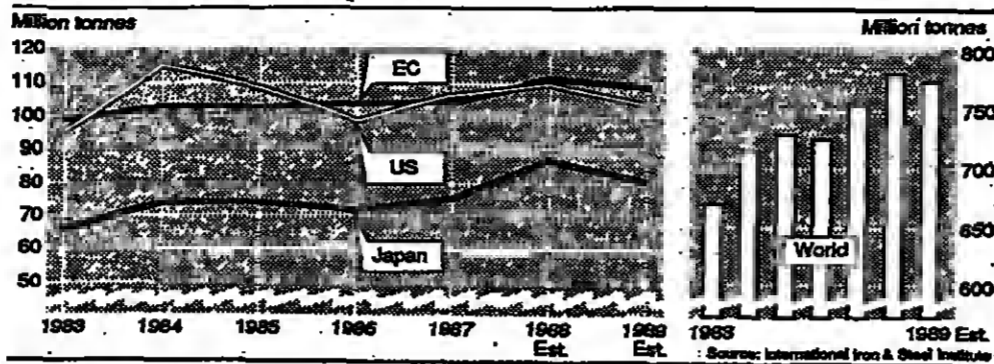
Most analysts and observers believe the next few years could be relatively static, with forecasts varying from a gentle downturn to a marginal rise, total demand hovering around 300m tonnes.

This would partly be offset by continuing healthy demand in industrialising countries. The world steel dynamics survey by New York-based analysts PaineWebber in the middle of last year gave odds of 75 per cent that steel production of developing nations would rise at an average yearly rate of 5 per cent to the mid-1990s.

At the other end of the scale Nikko Securities in Tokyo has just come out with an astonishingly bullish report on the world steel industry. It attempts to brush aside these analysts who now have cold feet about steel consumption.

The Nikko report predicts that demand will increase by between 2.6 per cent and 2.8 per cent annually. This would give a world steel production

Crude steel consumption



Source: International Iron & Steel Institute



Japanese steelmakers were full of gloom two years ago but rushed back into profits last year

of between 1.2bn and 1.3bn tonnes by the year 2000. World steel production capacity is about 900m tonnes and Nikko says the shortfall would be mainly made up by developing countries introducing new capacity to raise their levels of self-sufficiency.

The report is based on two main assumptions: that steel consumption will increase faster than the world GNP because of increasing formation of fixed capital and rapidly rising sales of consumer durables in developing countries, and that world real GNP growth will be 2.5 per cent per year.

Many analysts believe this will prove to be wildly optimistic. A mark, though, of how awkward forecasting steel demand can be is the Economist report which is packed with what are termed 'wild card' possibilities.

For example it gives odds of 50 per cent that steel production in the developed western world will expand by only one per cent per year through to the mid 1990s. It gives 20 per cent odds on production from these countries actually falling 20 per cent by the early 1990s as a result of weak demand, depressed prices and competition from developing countries.

The first half of 1989 looks quite healthy for steel consumption, though, is that these conditions will not last and that the growth of 1988 will have represented a peak in the consumption cycle. Any short term fall in western world demand is unlikely to be severe, however, unless the US economy falters badly and hastens a general recession.

The WORLD steel industry had what might be called a bumper year in 1988. Production was up around 9 per cent. Prices in western world markets were strong. US and Japanese steel makers and many of the European integrated companies made profits, some of them very fat indeed.

Along with this, some of the trends emerging slowly in the early 1980s gathered pace. More joint deals between steelmakers took place, especially between North American and Japanese producers. Among mature steelmakers, the drive towards higher value added steels accelerated.

So, how many of these developments will continue through this year and beyond? The general feeling in the industry is that production should be very healthy for at least the first half of this year but many companies expect the second half to be poorer.

World output, therefore, is unlikely to show last year's growth and in some countries, the US for example, it could actually fall.

Most of the trends in technology and partnerships between steelmakers will continue and develop. Japanese companies, which want more broad-based into the North American market, and US steelmakers, which want access to Japanese technology, are already lining up a series of new joint deals in the US for 1989.

The move into specialty-coated steel by steelmakers supplying such major users as the automotive industry will not only accelerate but will continue to the steel producers more closely to big users.

Total worldwide output in 1987 was 728m tonnes and for last year will probably turn out to be close to 800m. This comfortably passes the 1979 peak of 747m.

In the US - where the eight biggest producers took out a quarter of capacity in the 1980s, representing 40m short tons - crude steel production rose 10 per cent last year to 58m tons, according to AISI, a US industry analysis company.

Many plants in the US were operating full out. Spot prices for steel rose 17 per cent last year, helping to jack up profits of US steelmakers to an estimated \$2.5bn - an all-time record.

However, this might not last. AUS predicts a fall in the US steel market from 58m tons to 50m tons. Moreover, there is likely to be a continuing shift away from the major elements (known collectively as Big Steel) towards mini-mills. These already account for 20 per cent of US steel production.

177m tonnes in 1987 is expected to have risen to 157m tonnes for last year, once all production figures for December are collated, according to the International Iron and Steel Institute.

Demand looks buoyant for at least the first quarter of this year in western Europe. There is a fair amount of restructuring still to do in Europe, however, with attention focused on the Italian industry, which structurally is not in the best of health, and that of West Germany.

Joint deals between steel companies in Europe have been tough to organise. But the revival of British Steel raises the issue of whether Europe's lowest cost major producer will break out of domestic UK production by buying a production facility in Continental Europe, possibly West Germany.

Within this framework, continuing shifts in the relative strength of producer regions and individual countries took place last year and these will be a feature, too, of 1989.

Despite strong growth in steel production in western Europe, the US and Japan, a further shift towards developing nations took place in 1988. For example, output from South Korea was up 15 per

cent in the first 11 months of last year compared to the same period in 1987, according to Institute figures. Production in Taiwan from the relatively low base of 5m tonnes in 1987 was on course by mid year to leap for the full year by a half to 7.6m tonnes.

This is part of a continuing trend. Between 1979 and 1987, developing countries increased their share of world production from 7.5 per cent to 11.5 per cent. During this period, North America's share fell from 12.7 per cent to 13 per cent, western Europe from 23.5 per cent to 20.5 per cent and Japan from 15.2 per cent to 13.8 per cent.

Within western Europe, some of the shifts under way through most of the 1980s were partially reversed again last year.

For example, production in Italy fell only marginally between 1987 and 1988, from 24.3m to 23m tonnes, was stable in 1987 and rose last year by just 3.5 per cent, measured on the first 11 months' performance.

UK production slumped dramatically from 21.5m tonnes to 14.7m tonnes over the same period to 1986, but jumped to 17.7m tonnes in 1987 and was up almost 11 per cent last year.

Largest steel-producing companies

1987		1988		
Rank	Production (million metric tons)	Rank	Production (million metric tons)	Company
1	26.0	1	26.3	Nippon Steel
2	16.7	(1)	16.9	USINOR-SACILOR
3	13.6	3	11.4	British Steel
4	12.5	2	13.1	FINSIDER
5	11.3	10	9.5	Pohang
6	11.2	4	11.2	Nippon Kokan
7	10.5	11	9.5	Bethlehem
8	10.4	6	10.1	LTV Steel
9	10.4	12	6.8	USX
10	10.2	5	11.1	Thyssen
11	10.1	7	10.1	Kawasaki
12	10.0	13	10.1	Suomen
13	7.3	14	6.9	SAIL
14	6.5	15	6.6	ISCOR
15	5.9	17	5.9	Kobe Steel
16	5.8	16	6.4	RHP
17	5.4	20	5.0	Arcor
18	4.9	18	5.2	British Steel
19	4.8	19	5.1	Hogovans
20	4.7	21	4.5	National
21	4.5	22	4.4	Shaco
22	4.3	27	3.9	Coca-Cola Sambre
23	4.2	25	4.1	Vest-Alpine
24	4.1	32	3.6	CSN
25	3.9	28	3.7	Hyundai
26	3.8	24	4.1	Krupp-Steel
27	3.7	31	3.6	China Steel
28	3.7	26	3.9	ENSIDESA
29	3.7	30	3.7	Dofasco
30	3.6	33	2.9	Mannesmann
31	3.5	34	3.4	Shenyang
32	3.4	35	3.5	Tubarao
33	3.4	36	3.1	Paine-Selzgruber
34	3.4	37	3.2	Köster
35	3.3	38	3.2	Nippon Steel
36	3.3	39	3.7	ARBED
37	3.2	30	3.0	CVG Siderurgica
38	3.2	40	2.9	del Orinoco
39	3.0	41	3.0	Tokyo Steel
40	3.0	42	2.9	AHMISA
41	2.9	37	3.1	USMIRAS
42	2.9	36	3.1	SACILOR
43	2.9	41	2.9	Wierlson Steel
44	2.8	42	2.7	Svengst Steel
45	2.8	46	2.4	Roupe Steel
46	2.8	49	2.2	Algoma
47	2.7	47	2.3	Saurashtra Volkingen
48	2.5	48	2.2	Alcan
49	2.3	43	2.6	COGIPA
50	2.2	45	2.4	Co-Steel Inc.
51	2.2	44	2.6	Wheating-Pittsburgh
52	2.0	50	1.9	United Engineering Steel

USINOR and SACILOR were separate companies in 1988. Source: International Iron and Steel Institute

World of essential business information

FinTech, the specialist newsletters covering the impact of technology on your business.

An essential business briefing. It tells me precisely what I need to know and does so at the time and effort of scanning countless other publications.

- your business:
- Telecom Markets • Electronic Office • Personal Computer Markets • Automated Factory
 - Software Markets • Computer Product Update
 - Mobile Communications

This comment explains why so many people in key management positions rely on FinTech - the specialist fortnightly newsletters from the Financial Times Business Information service. Shouldn't you be sharing the advantage?

Get up-to-the-minute information on how new technology affects your industry... markets... investments... competitive performance. Simply select the newsletter most pertinent to

Get all seven FinTech newsletters FREE

To help you choose, send now for the newsletter covering your interests. If you wish, ask for all seven. Normally, this complete set costs £72 a fortnight, but you can sample FinTech FREE of charge.

Just write to Cathy Palmer at FinTech, FT Business Information Ltd., 30 Epsom Rd., Guildford, Surrey, GU1 3LE, or call Cathy on...

0483 576144

FINTECH

FinTech is also available on-line through Telecom Gold. If you have a Telecom Gold mailbox, simply type FINTECH after the prompt sign. As a subscriber, you're entitled to FREE Telecom Gold registration, and access to current and back editions at the nominal surcharge of 15p a minute.

TELECOM GOLD

Peter Montagnon charts changing relations with the Soviet Union

Whirlwind leaves confusion

ON THE surface, it looks as though a sea change has taken place in the Soviet Union's economic relations with the rest of the world, but for all the fanfare surrounding perestroika the actual process of implementing change is proving slow and difficult.

For much of last year reports of economic liberalisation were flowing thick and fast: the Soviet Union said it wanted to join the General Agreement on Tariffs and Trade, eventually to make its rouble convertible, to decentralise its foreign trade, to establish an export credit insurance agency.

Yet for corporate executives involved in the practical business of trading with Moscow the abiding impression left by last year's whirlwind is actually one of confusion. While change is certainly in the wind, business conditions have, if anything, become harder and, all appearances to the contrary, there is little concrete evidence that the Soviet Union is actually poised to begin a buying spree in the West.

According to the United Nations Economic Commission for Europe, Soviet imports for the last year rose by 10 per cent in volume terms during the first half of last year, but a large part of the increase was accounted for by grain purchases from the US and the gain was not enough to offset the decline in imports during the preceding two years.

There are two main factors holding back the process of integration of the Soviet economy with that of the Western world. The first is institutional: the constantly changing reform process has made for administrative uncertainty which tends to slow down practical decision-making. The second is financial: though its credit rating remains impeccable, the Soviet economy remains constrained by lack of hard currency which has been exacerbated by the weak oil price.

Businessmen seeking to trade with the Soviet Union report that the decentralisation which has led to the creation of a plethora of institutions entitled to trade in their own right has made it harder to reach the real decision-makers and added to worries about finance. It is no longer clear that the state will stand behind

partners to take majority control and assume management responsibility. What is less clear, however, is whether this will bring new freedom to recruit local labour and set their own wage rates, a factor which is still likely to slow the formation of fresh projects.

For the Soviet authorities joint ventures offer an apparently easy way of acquiring Western technology, know-how and management skills on the cheap. All these are vital ingredients to reform in an economy where the enterprise culture

all Soviet borrowers and a new element of commercial risk has been introduced into Soviet project finance.

This has been compounded by the fresh emphasis on joint ventures as a means of financing trade.

Moscow has been actively promoting such joint ventures for the last couple of years and most trading partners are encouraged to form them as a means of cementing their relationships and completing deals. But this involves Western partners in putting up risk capital of their own. Their reluctance to do so means that though the number of ventures signed has grown quite rapidly, most are in the service sector and involve only small amounts of money.

Last month the Soviet authorities announced that rules on joint ventures would be changed to permit Western

has long been stunted. The problem is, however, that Western partners do not necessarily approach such ventures with the same objectives.

Their desire is frequently to gain access to the Soviet domestic market for their products, while the Soviet Union itself seems more concerned with the development of a viable export industry that would reduce its dependence on raw material exports.

Meanwhile the Soviet Union continues reluctant to incur large new debts to finance imports of capital goods. Though it signed a \$1.5bn credit with German banks last year and an Ecu 600m line to finance imports from Italy, other mooted credits did not see the light of day and by Christmas it was clear that the Bank for Foreign Economic Affairs had backed away from

a proposed \$1bn UK credit line. Economists who follow the Soviet Union believe that it would be out of character for Moscow to risk a large increase in its indebtedness, especially at a time when its oil export revenues are weak.

Many thus conclude that the USSR will take several years before economic reform translates into closer ties with the West. Although this process could be hastened by a realisation on the part of Mr Mikhail Gorbachev's administration that the sign help is needed to help revivise the domestic market with consumer goods, thereby bringing some practical benefits from perestroika to the average Soviet citizen.

The urgency of this need was shown by a decision at the turn of the year to cut exports of consumer goods ranging from caviar to sofas and refrigerators, which would leave more supplies for the domestic market.

The philosophy behind the move suggests that Western producers of consumer goods will be encouraged to invest in the Soviet Union, bringing a new dimension to trading relationships that has tended in the past to concentrate on heavy capital goods and industrial raw materials.

A practical problem with this remains, however: how to finance their huge currency costs with exports that may yet prove difficult to place in Western markets.

WORLD INDUSTRIAL REVIEW 7

The world's airlines are in the midst of a major re-equipment surge

Traffic expansion demands investment

ALTHOUGH the world's airlines are continuing to enjoy a growth in traffic, the air transport industry as a whole is faced with some significant problems.

These range from a less than satisfactory financial return, through to increasingly inadequate airports and short-comings in many individual countries' air traffic control systems. Severe congestion both on the ground and in the air threatens to worsen as traffic expands.

The need to spend more on improving security both in the air and on the ground is also now becoming increasingly urgent, in the light of continued terrorist threats and actual attacks such as that which destroyed Pan Am Flight 103 over Scotland on December 21, with the loss of 270 lives.

During 1988, according to the International Civil Aviation Organisation, the overall volume of world scheduled air passenger traffic rose by 4 per cent, to reach a total of nearly 1.1bn.

Although this was below the growth of 7 per cent in 1987, and in fact the lowest since 1983, it nevertheless masks the fact that in some regions of the world growth has continued at substantially higher levels, especially in Western Europe and in South East Asia.

For the immediate future, growth on a global basis is generally expected to average between 5 and 7 per cent a year, at least until the mid-1990s, although it will continue to vary widely according to region. As a result, most aviation organisations, such as airport planners and air traffic control authorities, are operating on the assumption that the 1989 level of nearly 1.1bn world scheduled air travellers will double by the end of the century, and continue rising beyond that.

To cope with such expansion, the world's airlines are in the midst of a major re-equipment surge. This has already resulted in an outstanding order book for some \$22bn of new jet airliners, with Boeing the world's biggest jet builder, estimating that between now and the year 2005 there will be spending of a further \$342bn on jet airliners of all kinds.

Of that, about \$242bn will be spent on buying new jet airlin-

Year	Passengers carried	Freight tons carried	Ton miles performed				Total (passengers + baggage, freight and mail)	
			Passenger miles performed	Seat miles available	Passenger load factor %	Freight Mail		
1979	754	12.1	668,000	969,000	86	19,150	2,350	86,900
1980	748	12.2	677,000	1,071,000	83	20,120	2,520	89,710
1981	752	12.0	685,000	1,092,000	84	21,150	2,600	92,800
1982	768	12.8	710,000	1,115,000	84	21,800	2,650	94,640
1983	798	13.6	739,000	1,151,000	86	24,950	2,740	100,270
1984	847	14.8	794,000	1,229,000	85	27,150	2,950	105,970
1985	896	15.1	848,000	1,292,000	86	27,270	3,010	114,750
1986	868	15.2	802,000	1,388,000	85	29,580	3,100	122,380
1987	1,025	17.8	986,000	1,470,000	87	33,040	3,210	134,280
1988*	1,088	19.3	1,050,000	1,555,000	88	36,280	3,310	143,980

*Preliminary estimate. Excludes States not members of ICAO in 1988

Source: ICAO (December 1988)

ers to cope with traffic growth, while about \$100bn will be spent on replacing existing ageing aircraft that are also becoming unacceptable in terms of noise and pollution as many governments impose increasingly stringent regulations.

Boeing further estimates that these outlays will add about 7,500 new jets to the overall world airline fleet. After allowing for aircraft retirements due to age and environmental unacceptability, the overall world fleet by the year 2005 will be around 11,700 aircraft, compared with the 7,800 at the end of 1988 - a net gain of 3,900 aircraft.

The traffic expansion is already throwing considerable strains on the air transport system as a whole. In financial terms, the world air transport industry collectively earned a net profit of only \$300m on revenues of \$107.5bn in 1987, a return of only 0.7 per cent.

The overall profit figure masks the fact that while some airlines earned significant profits, such as British Airways, many others throughout the world incurred losses. But the International Air Transport Association has forecast that, on scheduled services at least, its own member airlines should show an improvement for 1988 with profits of over \$1bn.

Because of this financial situation, finding the cash to finance the new fleets of aircraft required to cope with the anticipated traffic growth could result in a substantial increase in the industry's overall debt burden, which on aircraft for scheduled services alone amounted to \$1.6bn in 1987.

This debt almost certainly rose further during 1988 as the number of new jet aircraft firmly ordered rose to a new record level of 1,047 aircraft, worth in all some \$47.47bn, compared with the 725 jets,

worth \$39bn, firmly ordered in 1987.

But an increasing number of airlines is now resorting to the concept of operating leases to meet their re-equipment needs, with their new aircraft being bought by leasing companies or other institutions, and the airlines paying the leasing fees from the aircraft's own operating earnings, thereby keeping their balance sheets free of debt.

But the rising tide of passenger and cargo traffic is also creating problems in the ground sector of air transport. Throughout the world there is now hardly an airport that is not undergoing either modernisation or expansion to enable it to cope with both actual and anticipated traffic growth.

Many countries also have plans for new airports. It has been estimated that total spending on airports world-wide between now and the end of the century will amount to some \$150bn in construction terms alone, together with some \$50bn to equip them, and to provide the essential improvements in air traffic control systems.

If such figures seem large, it must be borne in mind that some of the major new airport projects either planned or under way, are multi-billion dollar programmes in their

own right, such as that for Osaka, Japan, and for Hong Kong.

In the UK alone, new airport terminal building and other ventures, either under way or planned, include the new terminal at Stansted in Essex; the second terminal at Manchester airport; and the new rail link between Paddington Station in London and Heathrow Airport. Together with major new airport hotels at Heathrow, Stansted and Gatwick, these

projects will collectively cost close to \$2bn.

It is also now considered essential by many aviation analysts to adopt a new approach to ensure improved security on the ground and in the air throughout the world. Recent terrorist threats and actual attacks have demonstrated that no airline and no country can regard itself as being immune; the tougher measures now required must

themselves be world-wide in application.

They must begin from the initial conception of airport and terminal building development. The time has gone for ever when security facilities could be introduced into airport terminals, and even into airports as a whole, as afterthoughts to cope with problems as they arose. It is becoming increasingly accepted that such precautions, or the facili-

ties to provide them, must now be designed into all new airports or individual terminals as integral aspects of their overall function from the start, and that tighter security checks on passengers and baggage must now be accepted as a necessity for many years to come.

Inevitably this will add to the costs of airport design, development and operation. While governments may pick up some of those bills, it seems inevitable that a substantial part of them will be passed onto the passengers, and that the latter will be obliged to accept them as the price of greater safety.

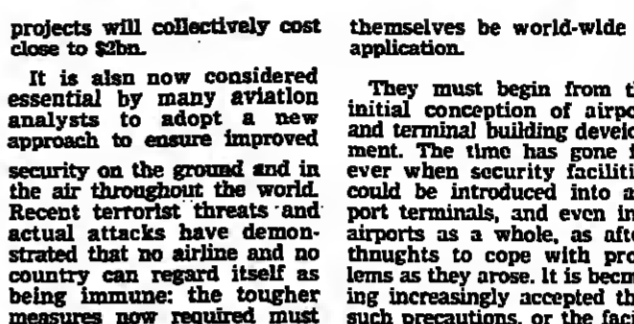
At the same time, investment in both the qualitative and quantitative aspect of the world's air traffic control and aerial navigation systems is also increasing to cope with the anticipated growth in the UK, new investment of more than \$1bn is planned by the mid-1990s to expand and improve what is already regarded as one of the world's most efficient air transport systems.

Substantial additional spending will also be necessary throughout much of the rest of Western Europe both to bring existing ATC systems up to the levels required to meet traffic growth and to improve the co-ordination between individual national systems so as to avoid the severe congestion that occurred during peak travel periods in 1988.

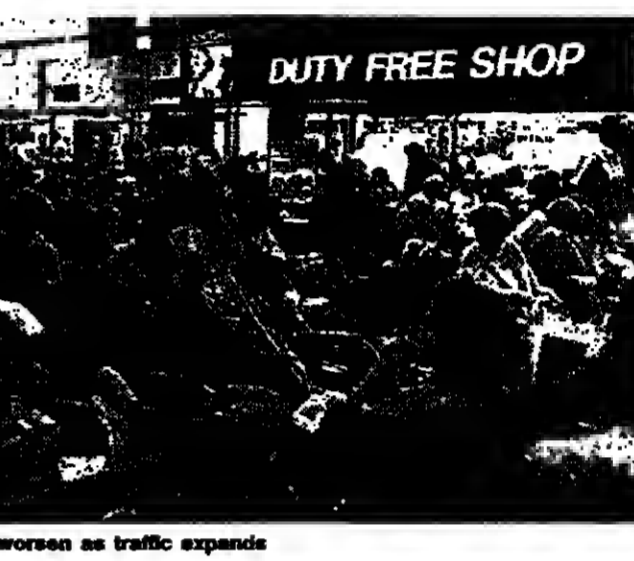
In communications and navigation, the era of the astronautical satellite is now dawning. A special committee set up by the International Civil Aviation Organisation on Future Air Navigation Systems (FANS) last year concluded that only satellite technology could provide the necessary global solution to current shortcomings in the air navigation and in-flight communications systems. The use of such advanced technology could bring estimated annual benefits to world aviation of between \$3.2bn and \$6.6bn, but the details of the system still have to be worked out on an international basis.



Heathrow after an Iranian airliner was shot down in the Gulf



Congestion on the ground will worsen as traffic expands



The joint venture European Fighter Aircraft (EFA) now dominates the European military field

ties to provide them, must now be designed into all new airports or individual terminals as integral aspects of their overall function from the start, and that tighter security checks on passengers and baggage must now be accepted as a necessity for many years to come.

Inevitably this will add to the costs of airport design, development and operation. While governments may pick up some of those bills, it seems inevitable that a substantial part of them will be passed onto the passengers, and that the latter will be obliged to accept them as the price of greater safety.

At the same time, investment in both the qualitative and quantitative aspect of the world's air traffic control and aerial navigation systems is also increasing to cope with the anticipated growth in the UK, new investment of more than \$1bn is planned by the mid-1990s to expand and improve what is already regarded as one of the world's most efficient air transport systems.

Substantial additional spending will also be necessary throughout much of the rest of Western Europe both to bring existing ATC systems up to the levels required to meet traffic growth and to improve the co-ordination between individual national systems so as to avoid the severe congestion that occurred during peak travel periods in 1988.

In communications and navigation, the era of the astronautical satellite is now dawning. A special committee set up by the International Civil Aviation Organisation on Future Air Navigation Systems (FANS) last year concluded that only satellite technology could provide the necessary global solution to current shortcomings in the air navigation and in-flight communications systems. The use of such advanced technology could bring estimated annual benefits to world aviation of between \$3.2bn and \$6.6bn, but the details of the system still have to be worked out on an international basis.

The shape of the industry will change

Competition likely to intensify

BETWEEN now and the end of the century, the world's aerospace industry is collectively expected to enjoy business worth more than \$1,000bn (£1,000bn), covering civil and military airframes, engines, avionics, guided weapons and spacecraft of all kinds.

But the shape of the industry is likely to change considerably, with increasing concentration upon international collaboration as costs rise and competition for markets intensifies. There may even be some major mergers, especially in the equipment and components section of the industry.

To cope with the rising tide of passenger and cargo traffic (with scheduled service passengers alone world-wide expected to amount to more than 2bn a year by the end of the century), spending on commercial aircraft is expected to amount to more than \$400bn.

Of that, about \$142bn is expected to be spent on new jet airliners (\$242bn on new aircraft to meet traffic growth, another \$100bn to replace existing fleets, and \$72bn already committed for aircraft yet to be delivered), with around another \$50bn being spent on smaller turbo-propeller powered regional airliners of all types.

There will also be heavy spending on improving and expanding the ground sector of commercial aviation, to enable it to cope with the traffic growth. Outlays on modernising existing airports or building new ones are expected collectively to amount to about \$170bn, with at least another \$20bn on equipping them, including provision for substantially increased outlays on improving the air traffic control system.

In the military field, in spite of the tightening of some

defence budgets, overall spending over the next 11 years is likely to amount to around \$700bn, of which about \$350bn will be spent on new tactical combat aircraft, with another \$150bn on military transports and specialist aircraft, such as tankers and airborne early warning aircraft.

Major projects already under way include the new European Fighter Aircraft (EFA) and new advanced tactical fighters for the US Air Force and Navy, along with the US B-2 long-range strategic bomber. Military helicopters, including such new ventures as the West European Anglo-Italian EH-101 multi-role aircraft, will account for about \$50bn, with the biggest individual share likely to be spent in the US for such major new ventures as the LEK Army multi-role helicopter.

Guided weapons of all types will account for another \$200bn, while spacecraft, including launch vehicles such as the US manned Shuttle space-transport system and the European unmanned Ariane rocket will also account for around \$200bn.

Some of these estimates may well prove to be conservative, but even so it seems likely that the world's aerospace industries as a whole will remain exceptionally active through the rest of this century.

But although there will be no shortage of work, the competition for it will intensify. While there will be fewer individual new ventures across the spectrum of aerospace, the production runs on some individual ventures will be considerable, involving many hundreds of aircraft and engines.

The reason is that development costs, in all sectors of aerospace are continuing to rise, as the industry continues

to spearhead the most dramatic advances in technology and the complexities of all types of aircraft, engines, missiles and spacecraft themselves increase. The inevitable result will be a limit to the number of new ventures on which available resources in money, facilities and technical manpower can be spread.

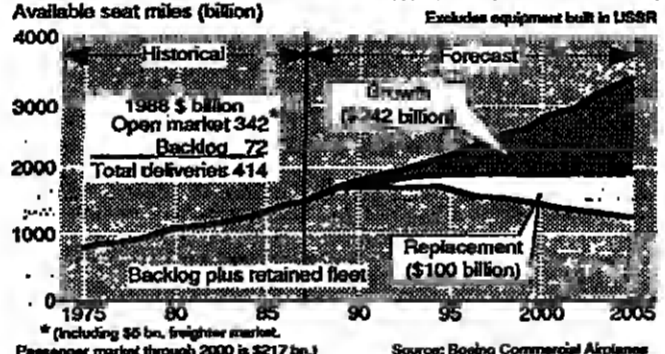
This situation has already started to generate a corresponding expansion of international collaboration, both to spread the burden of costs and to widen eventual markets for the projects involved. The joint venture European Fighter Aircraft (EFA) between the UK, West Germany, Italy and Spain now dominates the European military field, with the rival French Rafale coming a long way behind, although the multi-national Tornado combat aircraft venture between the UK, West Germany and Italy is also expected to continue until the late 1990s or even into the next century.

But while there are many studies under way for other types of military aircraft, including a new transport to replace the ageing Hercules C-130 and a new multi-national tactical helicopter, it seems likely only a few of these will come to fruition, so that the existing major ventures, such as Tornado, EFA and EH-101, will dominate the European military scene at least through to the mid-1990s.

As a result, those airframe, engine, component, equipment and other suppliers that have not yet won contracts on any of those major military ventures, either individually or on a collaborative basis, will face a bleak future.

Similarly, there is a limit on the number of new commercial aircraft ventures that the market can bear, and in this field

World jet airliner market



Passenger market through 2000 is \$217 bn. Source: Boeing Commercial Airplane



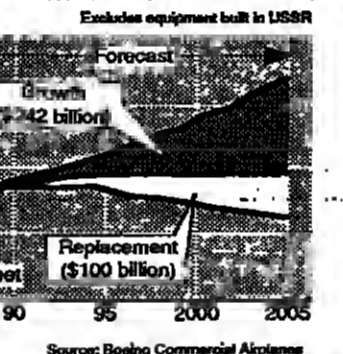
The joint venture European Fighter Aircraft (EFA) now dominates the European military field

also international collaboration is increasing.

The European Airbus consortium, comprising the UK, France, West Germany and Spain, with associates in The Netherlands and Belgium, is now the prime example of international collaboration in commercial aircraft development.

Airbus especially has demonstrated that with vigour and highly competitive designs it is possible to break into the hitherto US-dominated world market, and the European group has succeeded beyond expectations with its A-320 twin-engine short-to-medium range jet, which is now a formidable rival to both Boeing and McDonnell Douglas of the US.

World commercial jet airliner market



Source: Boeing Commercial Airplane



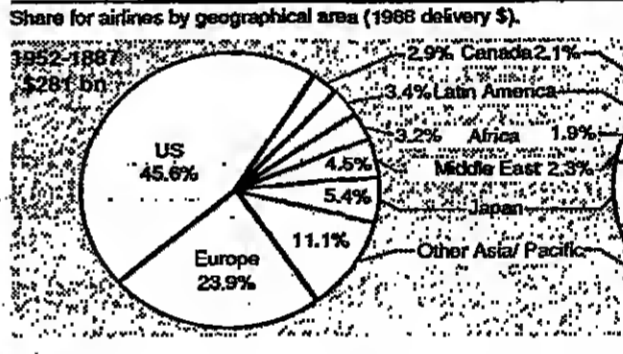
The joint venture European Fighter Aircraft (EFA) now dominates the European military field

But in spite of currently booming demand for new jet airliners, all the 'big three' makers have been obliged to limit the number of new ventures they are undertaking, because of high development costs and market resistance.

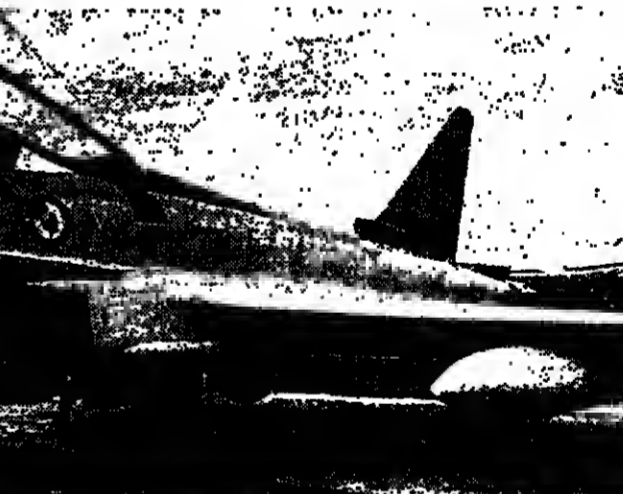
The trend in recent years has been for each manufacturer to develop derivatives of its existing aircraft models so as to provide 'families' of jets to meet most of the likely demands from the airlines through the rest of this century.

There have been only a few exceptions to this derivatives rule. Airbus itself, in order to broaden its product range to compete with the two US giants, has introduced two new

World commercial jet airliner market



Source: Boeing Commercial Airplane



The joint venture European Fighter Aircraft (EFA) now dominates the European military field

types, the A-330 short-to-medium range high-density twin-jet and its companion the four-engine long-range A-340. But it has done so with minimum cost by designing a substantial element of commonality into those two aircraft - common wings and systems, for example.

Even the McDonnell Douglas MD-11, although much publicised as a new aircraft, is a longer-range higher-density derivative of the earlier DC-10 tri-jet.

This trend towards derivatives seems likely to continue for a considerable time to come. The only possible break in that situation will emerge if fuel prices for any reason move upwards steeply, generating a demand for aircraft of much greater fuel efficiency.

Such a situation could create the long-awaited breakthrough for aircraft using the revolutionary new concept of 'unducted fan' or 'pro-pan' types of engine, which it is claimed will give fuel savings of up to 25 per cent compared with current generation turbofan engines.

Both McDonnell Douglas and General Electric of the US have been closely studying the development of such 'UFR' powered airliners, and are currently seeking orders for the first model, the short-to-medium range MD-91.

But so far, with aviation fuel prices still low, airlines are showing little desire to adopt such a revolutionary new type of aircraft, and both McDonnell Douglas and GE may face a difficult task in the years immediately ahead in winning

sufficient contracts to launch their new venture.

Another factor in the global aerospace scene that may well have far-reaching implications for the future is the trend for more and more countries, especially in the developing world, to seek to establish new aerospace industries of their own or expand existing ones.

Lacking initially the cash

and the technological facilities and knowledge, those countries are turning increasingly to the more advanced aerospace nations of Western Europe and the US for assistance, with the result that companies in the latter are increasingly arranging partnership agreements which help to develop the weaker industries.

The extent to which the industries of the more powerful countries will continue to do this will depend upon how swiftly their weaker partners develop. There are some fears that the latter may mature far more quickly than expected, and start to take over markets in which the stronger industries are already dominant.

In the meantime, however, the industries of the West are finding it convenient to go along with these aspirations of the developing countries, largely because they have so much work themselves on hand that they need the production facilities the others can offer. How long they will be prepared to do so, remains one of the big outstanding questions in global aerospace industry development.

Financial Times International Year Books published by Longman . . .

Corporate and financial profiles of major companies in key industries worldwide

An accurate knowledge of the current operations and financial states of key industrial companies is essential for successful forecasting. The Financial Times International Year Books provide this information in the form of detailed, accurate and up-to-date company profiles. All are compiled by our experienced editorial team who correspond regularly with the companies and constantly monitor the national and trade press.

Available in this series are:

- Mining 1989
- Oil & Gas 1989
- World Insurance 1988
- Industrial Companies I: Electronics
- Industrial Companies II: Chemicals
- Industrial Companies III: Engineering

Industrial research titles from Longman . . .

Designed for those working in industries closely affected by scientific and engineering innovations (with an emphasis on the manufacturing, processing and consulting industries), our list of reference on research titles includes:

- Aerospace Technology Centres
- Engineering Research Centres
- Electronics Research Centres
- Industrial Research in the UK

For more information, complete this coupon and return to:

Sales Dept, Longman Group UK Ltd, Westgate House, FREEPOST, HARLOW, Essex, CM20 1YQ, UK. Or speak to Liz Godden on (0279) 442601

Name _____ Job title _____
Subject of interest _____
Organization _____
Address _____
Postcode _____ Telephone _____

Longman

The European group has succeeded beyond expectations with its A-320 twin-engine short-to-medium range jet

“Nothing in the world
is more powerful
than an idea whose time
has come.”

Victor Hugo
(French novelist, 1802-1885)

tively they form a worldwide conglomerate that benefits from all the research, ideas and talents that the men and women of Daimler-Benz have to offer.

This will enable the Company to continue to build cars engineered like no others in the world; to create new concepts in fields as diverse as communications, transport



As world markets change, merge and consolidate into fewer, more powerful entities, new challenges and opportunities arise. So Daimler-Benz has changed – to meet the new challenges and take advantage of the new opportunities.

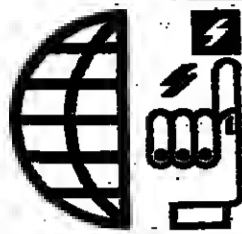
Three new divisions have been created: Mercedes-Benz Cars and Trucks, AEG Appliances, Deutsche Aerospace. Each is a leader in its individual field and collec-

and industrial automation; and, through the advanced technology of its control systems, become increasingly competitive in the fields of aviation and aerospace.

More than a century of experience is behind the contemporary resources and energy of the entire Daimler-Benz corporation as it is committed, not only to the challenges of today, but also to the most exciting and profitable opportunities of the future.

Daimler-Benz

FINANCIAL TIMES SURVEY



In the US and the UK the electricity supply industries are feeling the first stirrings of profound change.

Potentially important developments also await the sector in the European Community as member countries prepare for 1992, writes Max Wilkinson, Resources Editor

First tremors of upheaval

AMERICANS looking at the UK Government's plans to break up and sell the state-owned electricity industry often ask: "If it works, why change it?"

However, the US electricity supply industry is also in a period of profound change, which is beginning to move on a parallel course, although more slowly and from a different starting position. On both sides of the Atlantic this vast industry is feeling the first stirrings of revived growth, to which it will have to adapt in radically new ways.

The old presumptions of electric utilities during the two decades of growth after the Second World War have almost gone. In the US, they have been dying slowly since about 1975 under the stress of repeated conflicts with regulatory commissions.

In the UK, they were strangled peremptorily last year by the Government's privatisation plans. In continental Europe, too, the preparations for a single market in 1992 and the example of de-regulation in the UK have led to a questioning of old ideas.

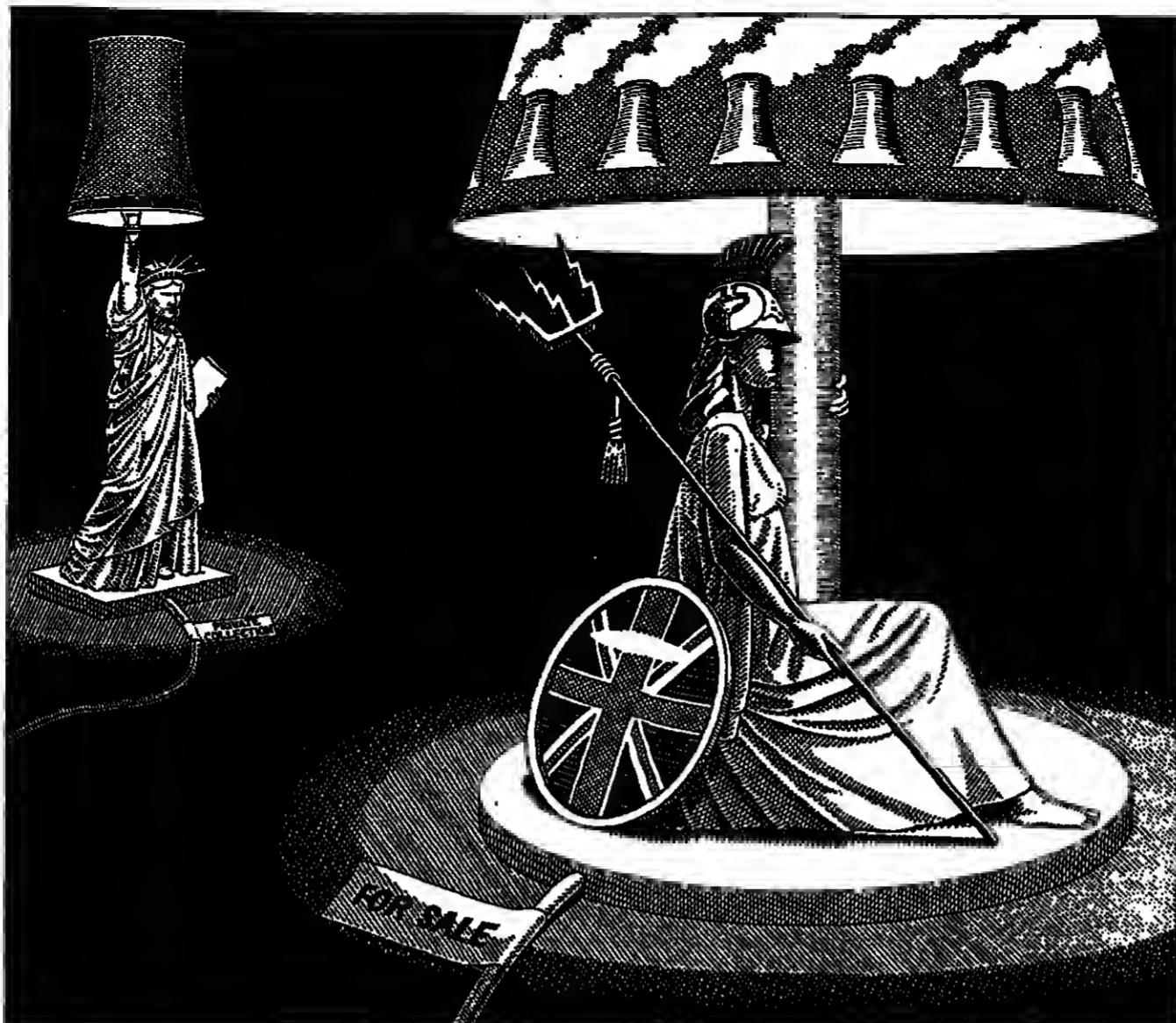
The traditional assumption of utility managers during the 1950s and 1960s was that their main job was to find engineering solutions to meet rapidly rising electricity demand. If

they did a reasonably good job, society would automatically pay for the plant through appropriate electricity tariffs.

In the US, the mainly privately-owned utilities could claim a fair return on the capital invested by their shareholders. In the UK, the investment was financed at fine interest rates by Government borrowing. In both systems utility managers had few financial worries, provided that they were seen to be meeting a national need.

The break-up of consensus between US utilities and their regulators during the years of rising prices and surplus capacity is described in a later article. In Britain, a similar process was happening much less visibly. The Treasury was becoming increasingly anxious about the tendency of the industry's huge appetite for capital, its over capacity and its failure to control costs, particularly in the nuclear sector.

But the battles about price rises were almost a mirror image of those in the US. The UK industry, which had no interest in profits wanted low prices to increase sales, while the Treasury pushed for price rises to give a better return to the owners (taxpayers). These tensions contributed to the UK Government's decision to



ELECTRICITY

break up the industry for its greatest sale yet.

The resulting structure, with 12 distribution companies and two generating companies separated by a relatively independent transmission grid, bears some resemblance to the model towards which the US system is gradually evolving.

At present most of the larger US utilities are vertically integrated and own the transmission network within their areas. Many, particularly on the East Coast, are being encouraged strongly to seek bids from independent generators to meet additional needs for power.

In time, this may lead in some areas to a horizontal split

between generators and distributors analogous to that proposed in the UK. But even if the structures do not converge, many of the most important issues confronted by the industries in both countries are remarkably similar. They include:

- Developing a style of regulation which keeps a tight hold over costs and prices and some oversight of strategy without stifling initiative and competition where it is possible;
- Stimulating economic efficiency by ensuring that prices track costs;
- Writing contracts for independent power producers which represent a fair apportionment of risks and can survive in changing circumstances;

Reconciling the desire of independent generators to keep their plant running and the system's requirement for "despatchability", that is the ability to switch it on and off as demand varies;
- Opening up the transmission network for competition without jeopardising the reliability of the system, creating an unfair advantage for larger customers or leading excessive costs onto captive consumers.

However, the most visible problem faced by utilities in the US, the UK and in other parts of Europe is what to do

about the future growth of demand. In the UK, the Central Electricity Generating Board says that some 15 Gw (15,000 Mw) of new plant will be needed by 2000. In the US, the Department of Energy believes at least 100 Gw will be needed and maybe very much more.

Such forecasts will be regarded with extreme caution by US utilities and the distribution companies in Britain. They all dread the financial consequences of repeating the over-ordering of the 1960s.

In the two decades from 1965, for example, the Los Angeles-based South California Edison company projected the need for some 34 Gw of additional capacity in its territory, of

CONTENTS	
The challenge of regulation	
New competitors	
What price nuclear?	2
Privatisation of UK electricity industry	
The clash of cultures	
Major policy issues	
Equipment suppliers	4
Cover illustration	
Robin Macdonald	
US regulatory commissions	
Transmission Lines	
Profile: Pacific Gas and Electric	5
European Community: 1992	
France	
West Germany	
Italy	6

which only 9 Gw was actually needed. By cancelling projects and abandoning plans, the utility kept supply roughly in step with demand, but many others were less lucky - or less skillful.

Apart from the notorious difficulty of forecasting energy trends, there are several reasons why utilities are likely to be cautious at present. In the UK, some consultants advising the industry on the basis of the US experience have suggested that the actual need for new plant may be very much less than the CEGB believes.

There are several reasons. Older plant may be refurbished so that its life is considerably longer than expected; industrial and commercial companies may be persuaded to make more use of their stand-by plant at peak times; and the system may be able to meet peak demands with much smaller machines rather than building "smokestack" power stations.

On top of all this, utilities must consider the rising political concern with environmental pollution and the global warming or "greenhouse effect" which is supposed to result from carbon dioxide emissions.

These concerns are inevitably linked to the pressure for more vigorous energy conservation measures, because every megawatt of electricity saved represents power plant which will not have to be built and coal which will not have to be burnt.

The potential scope for such savings could be huge. Dr Amory Lovins, director of the Rocky Mountain Institute in Colorado, an environmental research group, believes that around three quarters of the US's total electricity consumption could be saved by a variety of efficiency measures at an average cost of 0.5 cents per kwh, far below the average cost of generating power.

Even if Dr Lovins is much too optimistic about the scope for improved efficiency, it is clear, as the British Energy Efficiency Office and Californian utilities have both found, that very significant savings are possible with short pay-back periods for the investment.

In the US, there are strong moves to require utilities to

consider conservation as an alternative to new generation when planning new investments, and although the UK Government's privatisation contains few direct incentives to conserve, the recent emphasis of Mrs Margaret Thatcher, UK Prime Minister, on the environment may change this.

For all these reasons, it is likely that electricity planners will be very cautious in ordering large coal or nuclear plant for many decades to come. In Britain the new private utilities will be exposed to risks similar to those which have wrought such great changes in the US in the past decade and a half.

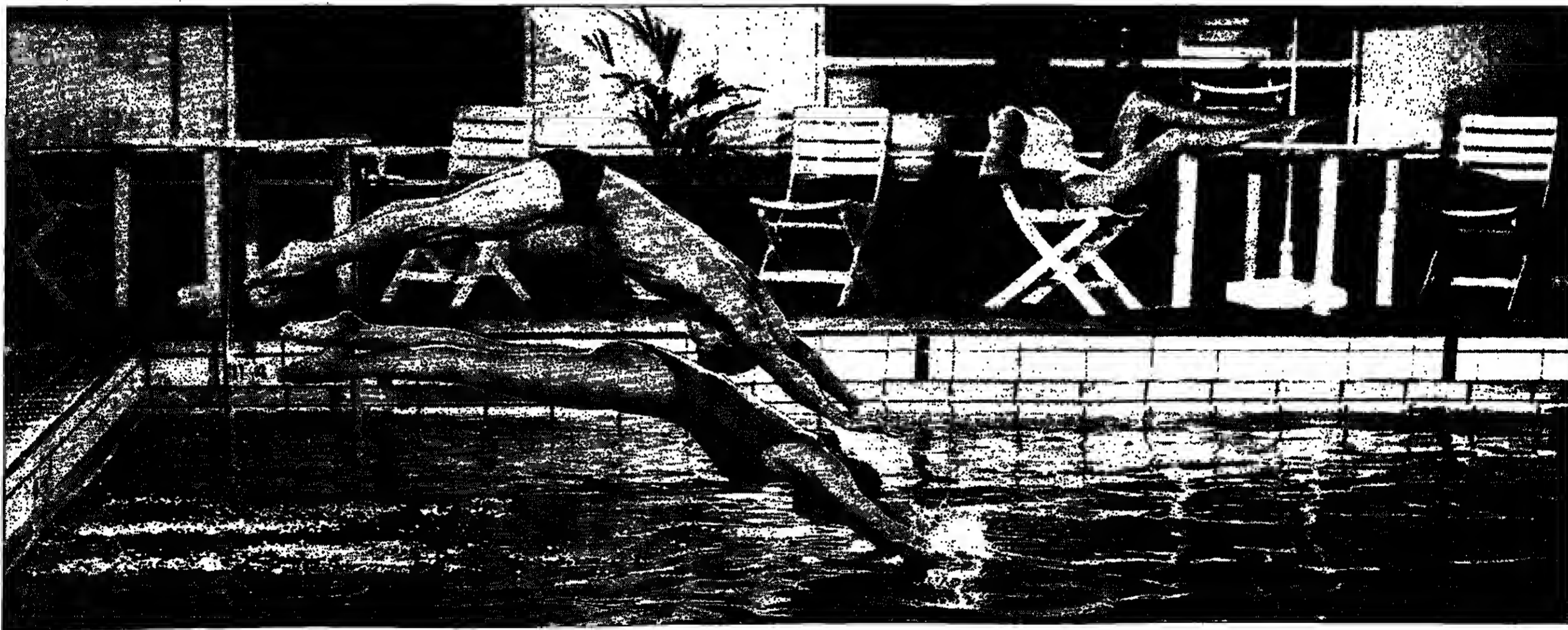
The indications are that their response will be similar: to minimise capital risk by ordering small flexible plant, like combined cycle gas turbines, and to push back as much risk as possible on to the generating companies. New technologies are making such plant appear more economically attractive, though they still tend to be cheaper to build but more expensive to run than conventional plant.

Competitive bidding for new power projects may help to establish fair prices, but it is likely to pose an unfamiliar set of problems to regulators on both sides of the Atlantic. They will need to be sure that the higher profits required by independent generators are a fair reflection of their risks, that the smaller plant does not reduce the long-term efficiency and reliability of the system as a whole, and above all that contract terms are not being designed to exploit regulations and pass excessive costs on to consumers.

In solving these problems the regulatory systems in the US seem likely to converge on that proposed in Britain. For in a world of competing generators, surrounded by strong monopolies in transmission and generation, the regulator will have to ensure that the competition can emerge fairly without paying tribute to vested interests.

As Mr Charles Stalon, a member of the US Federal Energy Regulatory Commission said recently: "US regulatory policy is at a crossroads." It might be said that UK regulatory policy is driving at full speed to the junction.

WITH ELECTRICITY, OPERATING COSTS TAKE A DIVE.



Whether it's a leisure centre, shop, hotel or office block, electricity can be the key to better energy management, cutting costs and boosting profits. Electricity is versatile.

Electric heat pumps provide warmth in winter and cool air in summer.

When heating they can produce 2½ times as much energy as they use.

Electric heat recovery systems shift unwanted heat to where it's needed.

For instance, in swimming pools such systems can reduce operating costs by up to 30 per cent.

In catering, electric kitchens save time and effort and are cleaner, cooler and less humid. Electric systems are often easier to

control than those using other fuels, and maintenance costs are frequently less - vital factors in energy management.

In many cases installation costs are lower and in energy costs alone electricity can be highly competitive.

For more information contact your Electricity Board or clip the coupon.

Please send me information about energy management applications. Tick as required: Heat recovery/heat pumps Lighting Electric catering Space/water heating

Post to: Electricity Publications, PO Box 2, Feltham, Middx TW14 0TG.

Name _____ Position _____

Company/Address _____

Postcode _____ Telephone _____

PLANELECTRIC
Energy for Life C/92

ELECTRICITY 2

Max Wilkinson on the search for a viable regulatory system

A maze with few exits

AS BRITISH officials drafting the rules for the soon-to-be privatised water and electricity industries enter the maze of regulatory policy, they are meeting more and more American counterparts struggling to find a way out.

In the US there is now a widespread belief that the "regulatory bargain" which was the basis of a stable and apparently successful age of development for the US's private electricity companies from the 1930s to the end of the 1960s, has been broken, perhaps for ever.

The old consensus was that in return for a monopoly franchise utilities would be allowed to meet all demands for power in their area. Provided their investments were prudent, and their running expenses not too extravagant, they would be allowed to pass on all their costs to customers plus a margin to give them a "fair" return on capital.

However, at the time that British Telecom, and later British Gas were being prepared for flotation, the US regulatory system was the subject of tales of confusion, litigation and commercial disasters.

The consensus on which the old "rate of return" regulation was based had broken down. Until the late 1960s, low interest rates and increasing economies of scale had allowed electric utilities to reduce prices steadily.

But by the mid-1970s the tide was running against the utilities much more strongly than many of them realised. The rapid rise in oil prices, increasing capital costs and construction delays, especially for nuclear plants, stronger pressures to protect the environment, and disappointing performances by some of the larger units, all combined to raise costs and prices.

Environmental and consumer lobbies were then able to use the open democratic structure of the US regulatory system with devastating effect, sometimes delaying applications for tariff increases by many years.

As a result many US utility managers believe that building large new power stations has become too risky, since regulators may not allow them to pass on the capital costs to their customers without a lengthy argument.

the commissioners for the US Federal Energy Regulatory Commission, told a London audience recently that the failures in the old regulatory system would lead to "fundamental changes" in the US electric supply industry.

"I am convinced that it will be difficult to save this system, though its adherents argue that it can be resurrected," he said.

The first reaction of the UK Government was to dispense with many of the open quasi-judicial style of US regulation, which were seen to have created far too many opportunities for lobbyists and lawyers. Instead of three to five politically appointed commissioners, UK regulatory bodies would be headed by one official appointed by the government,

In the US there is now a widespread belief that the "regulatory bargain" which was the basis of a stable and apparently successful age of development for the US's private electricity companies from the 1930s to the end of the 1960s, has been broken, perhaps for ever

operating largely in private sector.

The second decision was to concentrate the regulator's fire on average prices to consumers rather than on the utility's costs and capital spending.

For gas, domestic prices were to be allowed to rise by the rate of inflation less an arbitrary figure "X" set at 2 percentage points, the exception being that rises in the cost of gas purchased from the North Sea would be passed through without any regulatory oversight of the utility's purchasing policy, nor of its activities in the industrial sector.

This regime is now widely seen to have been too light, and the regulator's powers are being strengthened. Partly as a result, the regulations under which the electricity and water industries will be privatised are extensive and detailed and are moving much closer to the US tradition of "rate of return" regulation.

For electricity, the familiar price cap in the form of "RPI minus X" has been retained. Indeed, three separate RPI minus X formulae will be applied: to consumer prices; to

prices for the local distribution service; and to the tariff schedule for the use of the national high voltage transmission.

These formulae have widely different significances, however. In the transmission sector, for example, the X term will include an allowance for "a reasonable rate of return" on capital spent improving the grid.

This is similar to the traditional concept of US regulation, although the formula will allow prices to rise almost automatically until the regulator intervenes to review its terms, perhaps every five years.

At the sharp end of the industry, price rises to consumers will also be governed by "RPI minus X", but more significantly the industry will

However, the regulatory problems remain formidable and not dissimilar on both sides of the Atlantic. For transmission, the major challenge is to find a way of setting tariffs which are reasonably close to true costs.

This is particularly difficult because costs can vary by a factor of several hundreds depending on the time of day and the direction of flow. And power can flow in quite unexpected directions in an electrical network, and only a computer can calculate the exact paths.

The other big challenge is to accommodate competition between independent power producers into a regulatory framework. The US Federal Energy Regulatory Commission has attempted this by drafting new rules to facilitate competitive bidding for power contracts.

The British Government is following a similar approach, although the mechanism will be different. The common problem, however, is to determine how far competitive bidding in the wholesale power market can be allowed to replace traditional regulatory scrutiny. Many in the American industry hope it may. Some British ministers devoutly believe it will.

Yet even if competition to build and run power stations becomes established regulators will still need to remain on their toes.

Typical power contracts in the US last for between 15 and 20 years, during which time the purchasing utility will pay all the capital costs and a predetermined energy charge to cover the fuel used. On both sides of the Atlantic these costs will be passed directly down to consumers in the monopoly sector of the market.

That is the new bargain, sanctified, to be sure, by enforceable contracts. If the contracts turn out to be a good deal, everyone will be happy. But if fuel prices fluctuate as wildly in the 1990s as they did a decade ago, consumers will doubtless become active once again.

That is one reason why utilities are anxious to push much of the risk onto the independent sector. But they and their customers pay a premium for this, so regulators will increasingly need to ask whether this is value for money.

IT IS difficult to detect the first tremors in the lengthy dissolution of a large empire. But that is the process which appears to be starting in the electricity supply industry.

Utilities in several western countries are questioning the conventional wisdom that economies of scale justify ever bigger power stations to meet a growing electricity market.

Instead, a significant proportion of new capacity is being provided by small-scale plants developed by independent companies using a wide range of new technologies and fuels.

The trend is not universal. The biggest Third World countries, led by China and India, are still building large power plants of up to 2,000MW in grandiose electrification programmes reminiscent of those in the US and the Soviet Union between the First and Second World Wars.

France is committed to a rigid policy of building an array of 1,200MW nuclear stations, giving it Europe's biggest electricity surplus.

But in the US, UK and other parts of Europe and Scandinavia, the tide is running in the opposite direction, with major implications for utilities and the combustion equipment sector.

The change stems from a complex mixture of factors - commercial, environmental, technical and political - which favour smaller units at the expense of big ones.

It began with the oil shortages and recession of the 1970s. These slashed electricity demand and froze investment in big projects notorious for their long lead times.

Then came the slow-down in nuclear programmes due to safety fears so that by the time electricity demand was recovering there was an additional need for capacity which could be built rapidly.

Simultaneously, the economics of conventional coal-fired power stations, which had seen a resurgence after the flight from oil, were affected by the need to meet ever tighter environmental standards.

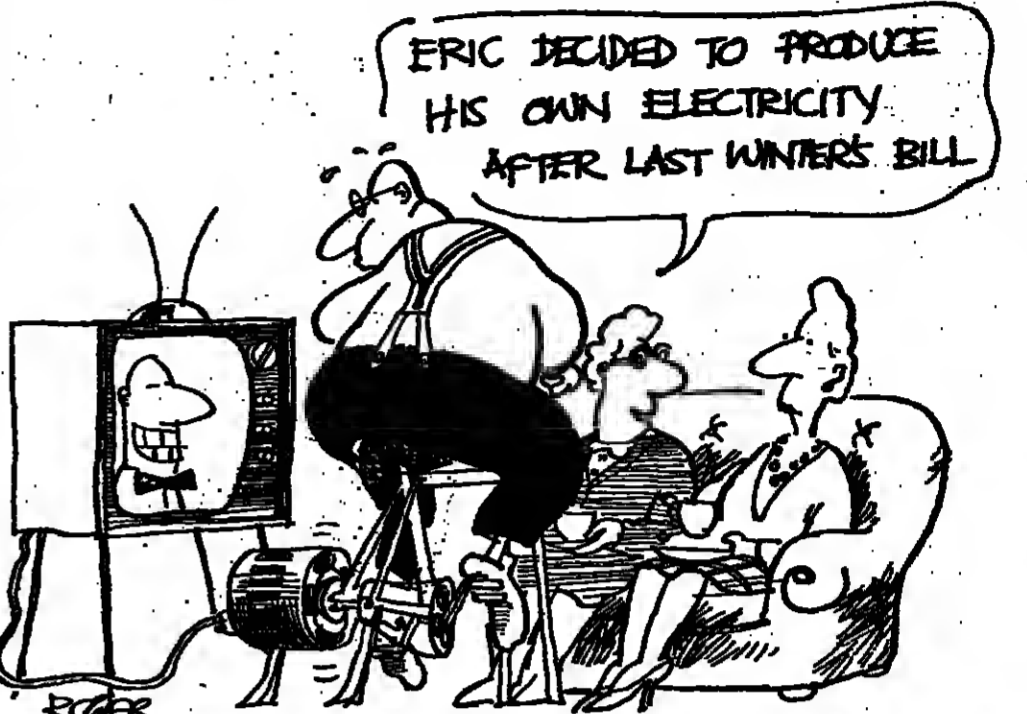
This has intensified interest in cleaning up emissions from existing power stations as well as new coal burning technologies - fluidised bed combustion and coal gasification. The environmental issue has also enhanced the attractiveness of natural gas. Once regarded as too scarce for power station use, it is now increasingly abundant and can be used in high efficiency burners, such as combined cycle machines whose hot exhaust gases drive a second turbine.

These innovations have been given a political impetus by government efforts to encourage more diversity and competition in electricity supply. In the US, this took the form of the 1978 Public Utility Regulatory Policies Act (Purpa), which set the stage for partial regulation of the wholesale power market.

The Act requires utilities to buy electricity from certain independent companies which

The new competitors

Challenge to the big is beautiful concept



can make good use of the waste heat from electricity generation. A decade later, the total capacity of the 3,720 Purpa generators, built or planned, had reached 62,000MW, 9 per cent of the national total.

In the US, the Government's privatisation proposals are giving the electricity industry the biggest shake-up in its history. However, with the legislation still in its early committee stage, the final extent of some of these changes remains to be seen.

In the US, where electricity demand is growing by 2.3 per cent a year, utilities are expected to need the equivalent of 250 new 1,000MW power stations over the next 20 years, five times the present total capacity of England and Wales.

But according to the Electric Power Research Institute (EPRI), financial restraints and less predictable demand mean that utilities are likely to meet this need by concentrating on extending the life of existing stations rather than by replacing them with plants of similar size. They will also deploy new technologies more appropriate to small-scale power stations, mostly well below 500MW.

Similar intentions have been

available and when British Gas is forced to ease its monopoly hold on the market.

Otherwise, the similarity with the US is underlined by the close interest with which these projects are being followed by US financial institutions and electricity companies. The former include GE Capital, the financial services arm of General Electric of the US, which in the past seven years has invested \$40n in about 30 US power stations, several of which were smaller than 100MW.

In Britain, plants smaller than 100MW may be favoured by the Government's proposal to exempt them from detailed control by the National Grid Company, which will direct the running of all larger plants on the basis of economic merit.

Entrepreneurs wishing to build plants of 100MW fear that this will prevent them from securing the long-term contracts of between 15 and 20 years needed to recover the large capital costs of construction.

If that happened, it would prove highly embarrassing to Mr Cecil Parkinson, the Energy Secretary, who has made increased diversity in electricity supply one of the main justifications for privatising the industry. It would also give the last laugh to the engineers of the CEGB, most of whom have not yet abandoned the concept that when it comes to power stations "big is beautiful".

France is the prime example in the second category. France's problems in finding markets for its under-used nuclear capacity are well-known, but it also faces serious difficulties in adjusting its reactor supply industry to its future needs. Clearly, the last thing France needs is more nuclear orders, but with a stock of about 60 PWRs which will need to be serviced, repaired and supplied with spares for the next 40 years or so when they will need to be replaced, it cannot be decommissioned, it cannot let the expertise of its reactor supplier, Framatome, decay.

In the third group, the long-established members such as Sweden and large parts of Germany have been recently joined by Italy, Switzerland and perhaps Belgium, with the Netherlands and Spain close to such a position.

The final group, which includes India, China and Brazil, all have the scope to use a great deal of nuclear power to promote industrialisation. However, in recent years the ambitious targets to expand the use of nuclear power have been cut, largely because of the high costs involved and the attractions of developing such indigenous resources as coal and hydro-power.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

A significant proportion of new capacity is being provided by small-scale plants developed by independent companies using a wide range of new technologies and fuels

What price nuclear?

High risk, low returns

IN SOME respects, the conditions for a revival of the commissioning of nuclear power plants would appear to be good. Right-wing parties are in the ascendancy in many countries and nuclear power has always tended to draw stronger support from the Right than the Left. There is also mounting public concern about acid rain and, more recently, the greenhouse effect, problems which would appear to be helped by increasing nuclear capacity.

This situation is exemplified in the UK where the Government is taking positive steps to ensure the future of nuclear power in the soon-to-be privatised electricity supply industry. What, then, are the prospects of a revival in nuclear power's fortunes? It is necessary to look back at the experience of the sector in the US.

In the US, issues such as deciding who should pay the extra costs associated with a reactor that was expected to achieve an 85 per cent load factor but only achieves 65 per cent, apportioning a 200 per cent cost overrun between

changing regulatory standards and utility incompetence, and deciding who should pay for a redundant reactor ordered on the basis of a grossly inaccurate forecast, have seldom been resolved to the reasonable satisfaction of both sides.

New nuclear orders are not a realistic option for the US for the foreseeable future.

Elsewhere, the debate is less overtly about economics and more about public acceptability. It is in the existing members of the nuclear power club, particularly the large ones, that nuclear power's fortunes will be decided.

These countries can be broadly characterised into four groups: those where nuclear power is politically feasible and there is scope to expand its usage; those where there is no scope to expand nuclear power; those where nuclear power is politically unfeasible; and the large developing countries like China, India and Brazil.

The problem for nuclear power is that while the first group is contracting, the next two - particularly the third - are expanding with the fourth offering little scope.

The problem for nuclear power is that while the first group is contracting, the next two - particularly the third - are expanding with the fourth offering little scope.

The problem for nuclear power is that while the first group is contracting, the next two - particularly the third - are expanding with the fourth offering little scope.

The problem for nuclear power is that while the first group is contracting, the next two - particularly the third - are expanding with the fourth offering little scope.

The problem for nuclear power is that while the first group is contracting, the next two - particularly the third - are expanding with the fourth offering little scope.

The problem for nuclear power is that while the first group is contracting, the next two - particularly the third - are expanding with the fourth offering little scope.

The problem for nuclear power is that while the first group is contracting, the next two - particularly the third - are expanding with the fourth offering little scope.

Only the UK and the Pacific Rim countries of Japan, South Korea and Taiwan can reasonably be placed in the first. The Pacific Rim countries would still seem to offer scope for a rapid increase in demand for electricity coupled with political systems capable of overcoming opposition and building and operating reactors cost effectively.

France is the prime example in the second category. France's problems in finding markets for its under-used nuclear capacity are well-known, but it also faces serious difficulties in adjusting its reactor supply industry to its future needs. Clearly, the last thing France needs is more nuclear orders, but with a stock of about 60 PWRs which will need to be serviced, repaired and supplied with spares for the next 40 years or so when they will need to be replaced, it cannot be decommissioned, it cannot let the expertise of its reactor supplier, Framatome, decay.

In the third group, the long-established members such as Sweden and large parts of Germany have been recently joined by Italy, Switzerland and perhaps Belgium, with the Netherlands and Spain close to such a position.

The final group, which includes India, China and Brazil, all have the scope to use a great deal of nuclear power to promote industrialisation. However, in recent years the ambitious targets to expand the use of nuclear power have been cut, largely because of the high costs involved and the attractions of developing such indigenous resources as coal and hydro-power.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.

Overall, it is increasingly hard to avoid the conclusion that nuclear power's contribution to energy supplies may be near its peak. Future expansion may be only in those few countries able to meet its technical demands and with political systems willing to underwrite its costs.



IT'S 1995 IN THE UNITED KINGDOM... DO YOU KNOW WHERE YOUR POWER'S COMING FROM?

Though market conditions for electrical generation might be changing in the U.K. one thing remains constant:

Circulating Fluidised Bed (CFB) combustion technology burns coal cleanly to generate economical power from all grades of domestic coal.

Ahlstrom Pyropower, Ltd. draws from the most extensive experience with CFB technology available - over 60 contracts and 120 unit years of operating experience worldwide.

We also have the most experience with non-utility power production projects in the United States, where independent power production and co-generation projects have been putting non-utility power on the grid since 1978.

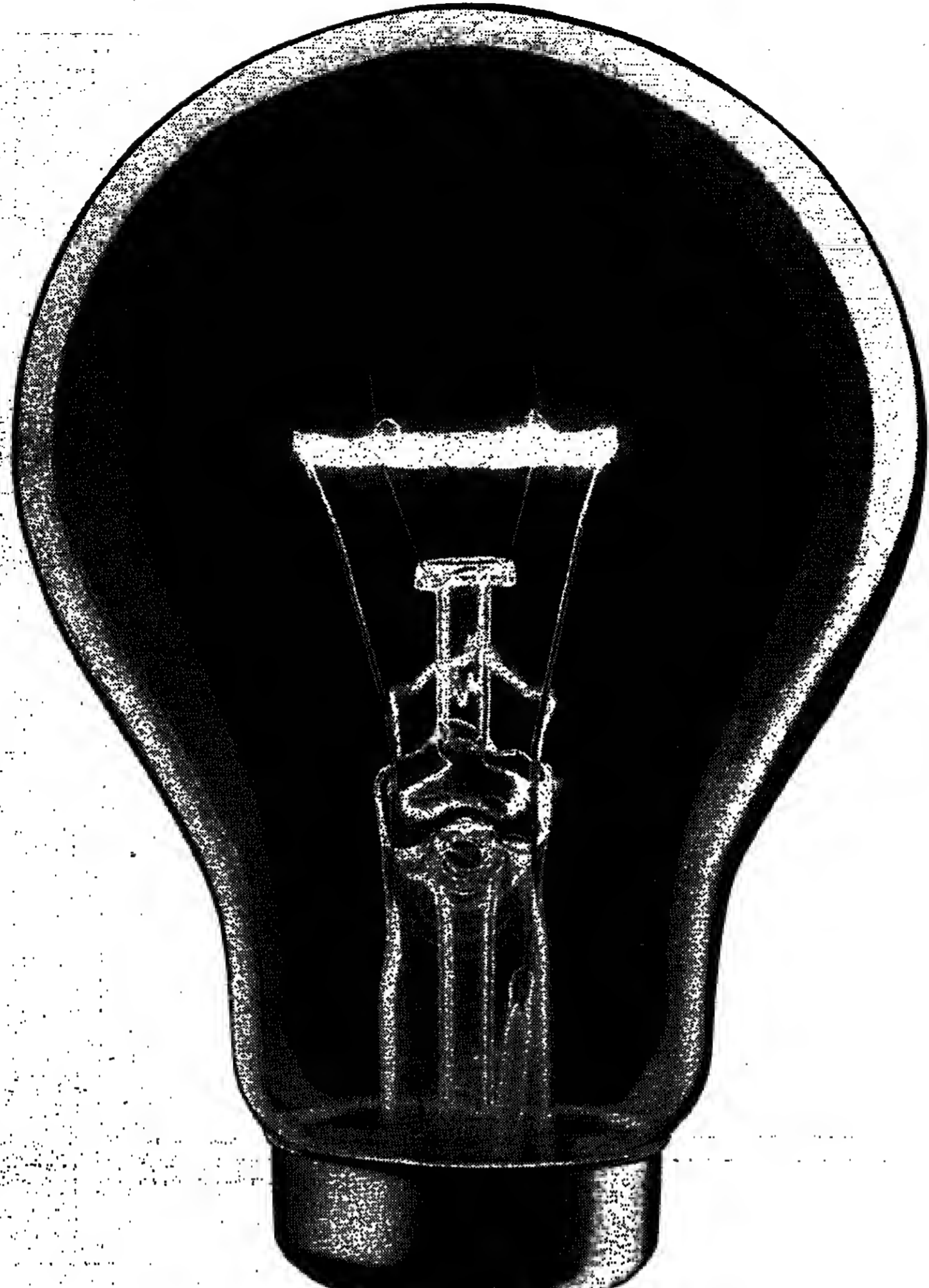
SO CALL US. OUR POWER IS FUELLED BY EXPERIENCE.

AHLSTROM PYROPOWER LTD. 17 EAST PARADE, HARROGATE, HG1 5LF. TELEPHONE: 0423 530870

Handwritten signature or mark at the bottom of the page.

هكذا عن الفيل

he big
concept
TO PRODUCE
ELECTRICITY
WINTERS



Mr. Faraday's idea was bigger than he knew

Making electricity is simple, as Michael Faraday taught us in 1831. If you keep spinning a copper disc inside a magnet, you'll generate a continuous supply.

Generating enough electricity, on the other hand, has created one of the biggest businesses in Britain, with assets of around £25 billion.

Our turnover last year was more than £8 billion, our trading profit £590 million. We still use magnets and copper. But on a massive scale, 24 hours a day, 365 days a year.

And we use good old steam power to turn most of our turbines. But to get up a sufficient head of steam we need a massive fuel supply.

Our annual fuel bill is over £4 billion, more than half our total costs. So keeping fuel costs down is clearly essential for our business.

And for the nation's business. Just about everyone in England and Wales uses our electricity. We have to generate as much as is needed, at as low a price as possible.

So we use many different fuels; fossil and nuclear.

And we'll continue to seek new sources of power: to harness the wind and the tides and the heat beneath the earth's surface.

Our efforts are needed not only to keep prices down, but to satisfy a widely fluctuating demand, day and night, summer and winter; through storms and strikes and other acts of God or man.

That's the generating game: high stakes, tough rules and plenty of challenges. But it's a game we have to go on winning.

By using our magnets, like Mr Faraday said.

THE GENERATING GAME
CEGB
NATIONAL POWER. POWERGEN.

rnns

ELECTRICITY 4

Andrew Holmes on an entrepreneurial spirit in a public utility

Culture clashes in the state's biggest sell-off

THE MAIN forces which have shaped privatisation of the electricity supply industry (ESI) have nothing to do with electricity.

The foremost consideration in the minds of the Government's planners, as the strategy for the ESI took shape in late 1987, was the behaviour of the privatised British Gas and, to a much lesser extent, British Telecom.

The months following the 1987 general election saw a spate of "horror stories" in the national press about the two recently privatised utilities. Whereas improved standards of service and lower prices had been among the promises of privatisation, they were far from evident in practice. British Gas was increasing the rate at which it was disconnecting customers for payment defaults, while in its industrial market the first murmurs of discontent were being heard; these would culminate in the referral of BGC to the Monopolies and Mergers Commission. BT, meanwhile, was the subject of numerous complaints about prices and about the provision of public services.

Many Conservative backbenchers believed that Sir Denis Rooke, British Gas's chairman, had railroaded the Government into letting him take his monopoly powers untouched into the private sector. The Government therefore decided that competition must be seen to be a central part of the plan for privatising the ESI.

But transmission is a natural monopoly and there is little opportunity for competition in distribution.

So competition had to be between power stations to supply the national grid, or to sell directly to major industrial customers. This could mean only that the Central Electricity Generating Board, the world's largest electric utility, had to be split up into competing units.

Although it has the appearance of a monolith, the CEGB is actually a federal organisation, with five "transmission districts" which handle the bulk supply of power to their regions, co-ordinated from the centre.

When privatisation was announced in May 1987, the CEGB's chairman Lord Marshall was busy centralising the utility's operations.

He wanted to replace the "regional loyalties" in the CEGB with a single corporate ethos. He wanted to re-model the CEGB on the lines of the world's most powerful nuclear utility, Electricite de France. The plan had not progressed far enough, however, to materially affect the utility's character, so it would have been fairly easy to split the CEGB up again, creating five regional generating companies.

However, the Government also wanted to expand or at least to maintain the nuclear generating industry. So while

AREA BOARDS	1988	1987
London	682	683
South Eastern	612	601
Southern	853	876
South Western	430	426
Eastern	986	976
East Midlands	777	789
Midlands	790	777
North Western	357	387
Yorkshire	776	788
North Eastern	465	461
North Western	741	729
Total area boards	8,137	7,991
To Railways	83	82
Other direct consumers	28	16
Interchange outside England/Wales	-	5
Total sales	8,248	8,094

the CEGB could be split, one of the resulting units had to be big enough to sustain the risks inherent in nuclear power. Therefore, the 70:30 split of power stations between "National Power" and "PowerGen" became more or less inevitable.

However, these two companies bear no relation to the transmission districts, so the regional loyalties which could have been used to forge some sort of corporate identity for

the privatised generators have been disregarded. The CEGB fought hard to avoid dissolution, but lost. The distribution companies - the 12 Area Boards - proved a ready source of alternative advice for Mr Parkinson, particularly as they had many old scores to settle with the CEGB.

The White Paper of February 1988, though a sketchy document in most respects, ended the arguments about the CEGB's dissolution, and began in earnest the process of preparing for privatisation. The CEGB would be split: its two successors - minus the national grid, which would pass to a new company owned by the Area Boards - would gear themselves up to compete with each other.

If they showed signs of collusion, the Director General of Electricity Regulation would be on hand to force them apart. The competition between the two CEGB offshoots, and new entrants to the generating market, would increase efficiency and thus force down prices.

At the time of the White Paper, the political pendulum had swung all the way towards the Area Boards; since then, it has swung back towards the CEGB.

Under the White Paper proposals, the generators would

Electricity's market, in contrast, grew virtually of its own volition, as new electrical processes made their way into factories and homes throughout the post-Second World War period.

The electricity industry never needed to encourage anyone to buy fridges or washing machines or, for that matter, electric lighting.

The advantages of such technologies were self-evident to the consumer, and as ownership spread, electricity demand grew, unprompted by the suppliers. The ESI's recent conversion to positive marketing, via the "Energy for Life" campaign, is a response to the stagnation of demand since 1978.

Gas, in many of its common uses, can be substituted by other fuels. The gas-fired television set, fridge or washing machine do not exist, and never will.

This is why electricity, unlike gas or oil or coal, has traditionally been regarded as a service, not a commodity.

The fact that it cannot be stored - except by moving water up mountains - and has only one means of transport further emphasises its difference from most other commodities.

The "service versus commodity" argument is to some extent an abstract one. Much more tangible, and much more intractable, is the actual nature of the industry and the outlook of its personnel.

Fall of "returning" electricity to the private sector is difficult to take seriously. Even in the pre-nationalisation era, electricity supply was, as much as anything, a municipal undertaking with limited private sector involvement. And the pre-Second World War ESI bore little resemblance to the huge industry which has developed since 1945.

The public sector is all the industry has ever known, and as a result its staff tend to think of themselves as public servants. Whatever accusations of arrogance and technological conservatism may be levelled - quite justly - at the CEGB, its staff act according to their perception of the national interest, rather than any narrow, sectional view.

But attitudes change, though the problems which arise out of privatisation are not. The CEGB staff are just as determined to protect their jobs as they are to protect the public interest. The privatised system will be founded on commercial contracts to an extent unknown elsewhere in the world.

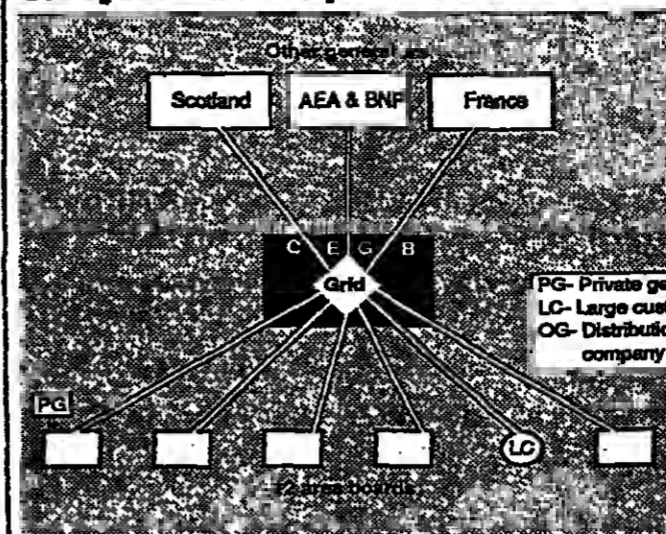
Commercial negotiating skills will be very much at a premium, particularly in fuel purchasing. While the CEGB and Area Board personnel embody a wealth of technical skills, only a very limited number of people in any of these organisations spend their time in activities which could be accurately called "commercial".

To take but one example, the CEGB is not blessed with legions of contract lawyers. Where will it find them in sufficient numbers, at a price it can afford to pay?

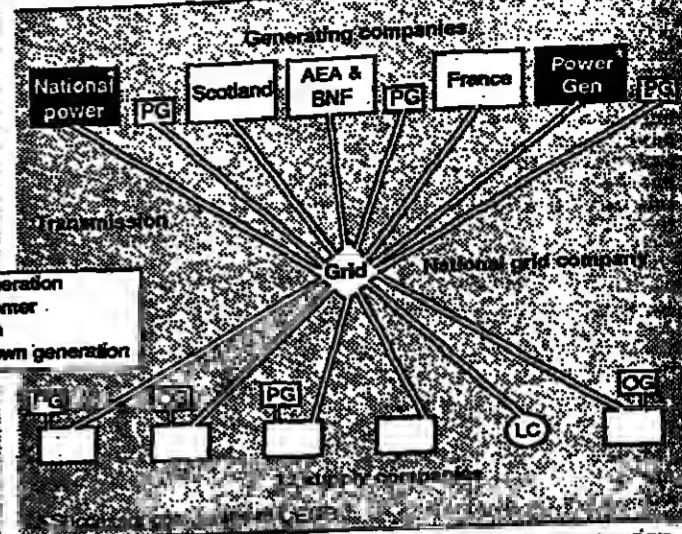
Privatisation of the ESI is the most radical and far-reaching, as well as the largest, such exercise the Government has undertaken. The political will is strong, the industry's prospects are good, but as the ESI's personnel, capable of becoming electric entrepreneurs?

This is one of the basic differences between British Gas and the electricity industry, BGC, even in the public sector, faced real competition

UK system before privatisation ...



... and after



POLICY ISSUES

The balance of power after privatisation

WHEN MR Cecil Parkinson, UK Energy Secretary, assured Mrs Margaret Thatcher, UK Prime Minister, that electricity privatisation would not result in power cuts because the same experienced engineers would be controlling the system in much the same way, she replied: "Cecil, if nothing is going to change, why are we doing it?"

It was a joke, presumably, but Mrs Thatcher's remark cut to the central difficulty of the largest and much the most complex of her Government's privatisation projects.

The dilemma was implicit in the White Paper which announced the plans for the electricity sale in February 1988; it was at the centre of the tough bargaining last year during the drafting of the Electricity Bill, and it is by no means resolved.

Mr Parkinson wanted to force the industry to accept the discipline of competitive markets in the generation and wholesaling of electricity. But the Government was far from willing to accept all the

The Government has justified its decision to keep nuclear power at around 20 per cent of total capacity on strategic grounds, as a hedge against future increases in fossil fuel prices, and, less vocally, as a weapon in case of a miners' strike

First, it restricted the number of generating companies to only two instead of perhaps four or five. This was necessary because one company had to be big enough to absorb the risks of a nuclear programme. Second, the nuclear sector, which had to be specially protected by way of a nuclear levy on consumers, will pre-empt a large part of the potential market for "base load" power, that is from plants with low enough running costs to operate even when demand is slack.

The pre-emption of the market is especially significant in relation to another of the Government's directives, that all power plants above 100MW shall submit to central dispatch by the National Grid controllers. This means that all except the smallest plants will have to enter a period of con-

tinuous competition to be allowed to run. In periods of slack demand, only those with the lowest running costs would be allowed to switch into the system. Since nuclear plants are expensive to build but very cheap to run, they will always be used in preference to other plants, in summer or at night times, therefore, the competi-

tion between remaining plants to meet a small amount of demand will be intense. But independent generators, relying heavily on bank loans, may find it hard to finance new projects unless they can be assured of steady demand. Although the provisions for a nuclear quota and central dispatch appear conservative, the Government's plans for opening up the industrial market are extremely radical. Industrial companies and private generators will be free to use the transmission wires at a "fair price".

In theory, therefore, larger companies with a steady demand for power could contract for cheap sources of electricity, driving prices down close to fuel costs, whenever there was a surplus of supply. The area supply companies

could then lose revenues and be left with fixed assets and contracts for generating capacity which would have to be charged to a smaller base of customers.

The extent to which non-unionised companies will walk away from their area supply companies remains unclear, however. Much will depend on the details of the transmission and distribution tariffs, and the contracts between the 12 area supply companies and the two generators. These contracts will be written initially by the Government as the owner of both parties.

The balance in these contracts between the fixed charges for use of a generating plant and the energy charge for operating it will effectively allocate risk between generators and supply companies.

If the capacity charge is high, the supply companies will effectively own the plant in the sense of having to bear their capital cost which need to be run or not. In that case generating companies

The authorities have gone further than was necessary to protect customers from monopoly abuses

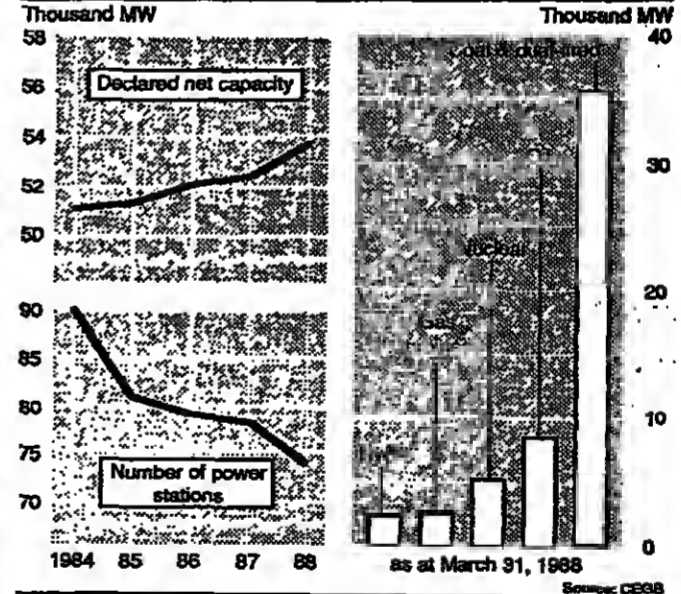
would be reduced to mere operators, at least for the period of the contract.

In times of surplus capacity, the supply company would have to re-sell power. It is difficult to see how this need at any price above that specified in its contract for running the power station. On the other hand, if the capacity charge were very low and the energy charge correspondingly higher, the generating company would take more of the risk, since it would be losing money whenever the plant were not called upon to run.

The generator would then have an incentive to offer cheap power at any price that were above its actual running costs, perhaps to industrial customers of the supply company to which it was initially contracted to sell power. It is impossible to guess how such a complex market will work out until the Government and the industry agree the general shape of the contracts, and for understandable reasons, they are finding this very difficult to do.

Max Wilkinson

UK power plant capacity



WE'RE IN THE PINK TO KEEP YOU IN THE BLACK.

Schlumberger Industries are the world leaders in metering - gas, water, electricity and heat. In the United Kingdom we produce the world's first electronic single phase meter.

Market and technology leadership has led to our natural expansion into the Energy Management market, with the recent acquisition of the highly respected Xyntax Building Energy Management Systems.

A combination of growth, expertise and world wide resources makes us the first choice in Electricity and Energy Management.

Schlumberger Industries Electricity Management Langer Road Felsham Suffolk IP11 8ER England	Schlumberger Industries Energy Management Science Park Milton Road Cambridge CB4 4FS England
--	---

THE ANNOUNCEMENT

In December last year GEC of the UK is putting its heavy engineering businesses into a joint company with Alstom of France was another huge piece in the amazing spate of restructuring overhauling the world's power equipment industry.

The smaller deal between General Electric of the US and GEC in switchgear and gas turbines announced this month confirmed the same pattern. From an industrial sector characterised by fragmentation in which scores of companies compete from their own national redoubts, power engineering is turning into a classic case of cross-border amalgamation.

In power equipment engineering the big are tending to get very big indeed in a trend started by the merger of Asea of Sweden with Swiss company Brown Boveri in 1987. Small suppliers left out of this trend could soon find themselves in a very small wind.

Beyond that, the positions in all this of two big equipment suppliers, GE and West Germany's Siemens remains unclear.

EQUIPMENT SUPPLIERS

Market reshaped by tactical alliances

GE has been looking for further partnerships. Siemens also has no major partner, except in nuclear engineering, though it is discussing joint ventures in transformers and switchgear with fellow German company AEG.

Siemens and GE had discussions last year but nothing then appeared to have come from the talks. Looking what is turning out to be one of the most fundamental shake-ups in any industrial sector was the merger of Asea with Brown Boveri, creating Europe's largest heavy engineering company.

Since then, ABB, as the new group is called, has taken control of the industrial assets of Franco Tosi, the Italian steam turbine and boiler-maker. It is also effectively absorbing Ansaldo of Italy and has purchased other power equipment suppliers in southern Europe.

ABB's West German subsidiary has pooled its nuclear reactor technology with Kraftwerk Union, Siemens' power station equipment division, and has also bought a steam turbine manufacturing plant in Germany from AEG.

The Swedish-Swiss company has also formed two large power equipment joint ventures in North America with Westinghouse.

Power engineering companies were already looking around anxiously at a business environment dominated by a paucity of orders with up to 70 per cent worldwide margins.

In the power tools sector the big are growing ever bigger

turing overcapacity and escalating research and development costs.

So the formation of ABB sent the rest of the industry in a spin with everyone attempting to find former competitors to link up with in deals which would help spread geographic coverage, provide cost savings

through rationalisation and broadened product ranges.

The deal between Compagnie Generale d'Electricite (CGE), of which Alstom is a wholly-owned subsidiary, and GEC represents another large piece in the new European power engineering jigsaw.

Though the new 50-50 joint venture, still to be finally agreed, includes a wide range of other activities, including industrial automation and rail equipment, it would also represent the largest power engineering company in the European Community with net assets of \$200m.

small power stations for which GEC's product range is not strong.

GE is taking a minority stake in a new gas turbine business arm with GEC and Alstom as well as pursuing some of its Continental power gear interests in with GEC. GEC has formed a partnership with Westinghouse in nuclear power engineering which is excluded from the Alstom arrangements.

These are not the only link-ups changing the face of the industry. Framatome, the French nuclear station builder, is negotiating a partnership with Babcock and Wilcox of the US. CGE has a stake in Framatome but Framatome is not part of the deal with GEC.

Japan's very strong power station equipment suppliers look as if they might be drawn into some arrangements with their European and US competitors. ABB and Framatome have held discussions with Toshiba.

Mr Percy Barnevik, ABB's chief executive, says he would prefer a Japanese partner in the Far East than outright competition in that region.

So far, the only European supplier that has set up direct manufacturing and marketing links with a Japanese supplier is Northern Engineering Industries in the UK - for middle power switchgear and gas turbines.

Nick Garnett

Handwritten signature or mark at the bottom of the page.

US regulatory groups are now more responsive to market forces, reports Max Wilkinson

A tough generation game

ONE OF the most important effects of allowing private capital into an electricity industry is that regulation is pushed out into the open.

In Britain, where the systems for controlling the large state electricity monopolies have been "sponsored and ambiguous", the Government has been slow to emphasise this benefit, even though the regulatory system it is establishing is potentially extremely tough.

UK ministers are generally more interested in the entrepreneurial drive which they hope will be unleashed by privatisation, and are far from sympathetic to the US style of regulation which is seen to be far too intrusive.

However, important changes are taking place in many of the US's state Public Utility Commissions (PUCs) as they try to make their regulatory regimes more responsive to economic forces and the new competitive pressures in the generation market.

In California, for example, where the regulatory commission has been one of the most interventionist in recent years, the pendulum seems now to be swinging back to a more market-oriented approach, though it is still far from *laissez faire*.

Mr Mitchell Wilk, the PUC's recently elected president, says that the electricity tariffs approved within the territory are now all within about 10 per cent of the true cost of providing the service. This represents a major change from the old "political" rates intended to protect domestic customers from rising costs at the expense of larger industrial consumers. The correction back to a more economically rational pricing system has been possible, Mr Wilk says, because of the fall in generation costs which resulted from weaker oil and gas prices.

Even so, past regulatory decisions have left Californian electricity utilities with higher average costs than, with hindsight, they need have had.

In the 1970s, for example, the PUC was so anxious for the state to economise on oil consumption that it required the utilities to buy power from

many small independent producers at prices which are now some 30 per cent above the utilities' average generation costs and almost three times the cost of the cheapest power available.

Larger companies have been threatening to leave the system altogether and build their own generating plant unless they are offered lower prices. In California, as elsewhere, such deals cannot take place without the agreement of commissioners, because of the historic anxiety that utilities would cross subsidise their business in the industrial sector from their captive domestic customers.

The commission's response, Mr Wilk says, has been to allow industrial prices to fall, but only to a level which the utility can demonstrate reflects the true economies of a bulk supply. The largest cut recently was agreed for Chevron, the international oil company, whose tariffs were cut by a third.

Such judgements are not easy to make, and the detailed costings and arguments that follow from them require more regulatory effort rather than less, even where the effect is towards more market-based pricing.

Mr Gordon Smith, vice president of Pacific Gas and Electric in charge of tariffs, says the quality of officials in the commission has improved in recent years, and that this has led to more sophisticated discussion of tariff structure.

Mr Wilk believes that market discipline will be most evident in the generation sector, where the commission has been developing more sophisticated systems to deal with the wide variety of contracts likely to be offered.

"We now have a system by which the utilities which need more power will go out for bids. If the best bid can beat what the utility would have paid to build the plant itself, that's an advantage to consumers."

In spite of this enthusiasm for competition and the market, Mr Wilk is cautious about the scope for de-regulation in the electricity business. It is not, he says, at all like telecommunications where technological change is rapidly opening up choices for customers.

"I don't think there will be less regulation," he says, "but there will be a shift from reviewing all past investments with hindsight to becoming an umpire in the new competitive sector. We will have to establish the rules of competition and make sure the process is working fairly."

Dr Barbara Barkovich, a former head of policy and planning at the commission, who is about to publish a book on its increasing interventionism, also believes the regulators are unlikely to let go of the reins, though they may hold them more lightly in some respects.

"Commissioners will continue to be involved in the policy arena, because they do not

trust utilities to keep on cutting costs. They fear that they may opt for the easy life unless the regulators keep up the pressure."

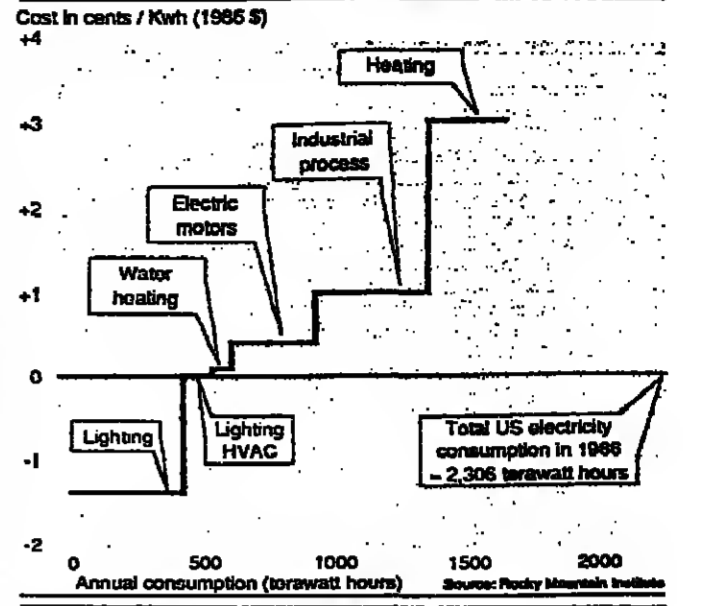
Dr Barkovich says the commission started to intervene much more strongly after 1975 when it pushed the Californian utilities into a major energy conservation drive in response to the energy crisis.

That programme ran into political controversy because direct subsidies for energy saving were taken up by the well-to-do rather than the poorest customers. The regulators have now scaled the programme back, concentrating benefits on the poorest consumers.

However, even in a period of weaker energy prices, few doubt that it is better to conserve energy whenever it is cheaper than the cost of generating it.

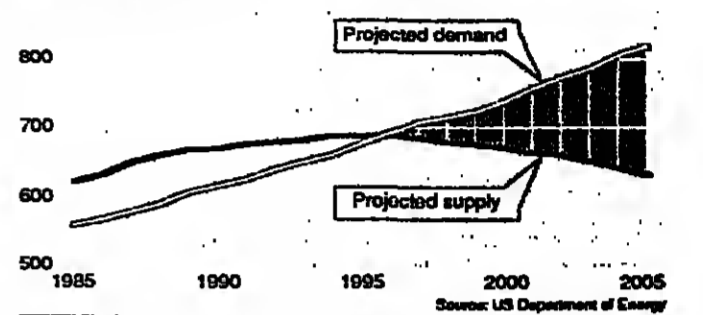
So the commission insists that any new generation projects must be tested rigorously against the costs and benefits of conservation proposals. And the commission believes that this is just the kind of trade-off which should be kept in the hands of the guardians of the public good at the PUC.

Potential for electricity saving in the US



Source: Rocky Mountain Institute

The US electricity gap



Source: US Department of Energy

TRANSMISSION LINES

Tightly guarded private sector monopoly

A YEAR AGO the centre of debate in the US electricity industry was about ways of introducing more competitive bidding by independent power producers. Now it has moved back to the complex and much disputed question of opening up the use of the wires to outsiders.

The reason is that it is not much use trying to be an independent generator if you cannot get your product to market. At present almost all the overhead power lines are owned by electricity utilities, usually in private ownership. Everyone agrees that this part of the business will remain a monopoly.

This would not matter as long as competition was confined to generators willing to site the plant within a utility's own area, as has happened in recent competitive tendering to supply power to Boston Edison and Virginia Power. Then the utility will simply use its own lines to transport the power as part of the deal.

But what happens, if a power supplier wants to locate the plant in some other utility's territory? It will then have to transmit the power across the lines owned by one or more third parties. This is called "wheeling", and it raises issues which many consider will prove a major barrier to the development of anything like a free market in electricity.

The complexities were, indeed, so great that the Federal Energy Regulatory Commission (FERC) - which supervises transactions in wholesale power - pushed the issue aside last year when it published three draft rules intended to smooth the way for competitive bidding. But it has now had to return to the transmission issue before making progress with the more radical of its bidding proposals.

One of the central problems, set out in a recent study by the National Regulatory Research Institute is that it is difficult to know what path electricity will actually take in a network.

It may be intended to send power from utility A to utility B across the intervening wires of C, but the power may actually flow in a wide loop across lines owned by utilities which have nothing to do with the transaction. Then, the cost of transmitting power varies enormously, depending on the direction of flow and the time of day. At night time the cost may be almost zero, whereas at peak times on a congested line, the cost may be very high.

In most parts of the US, transmission prices take little account of true economic costs, being based on a formula related to the historic cost of erecting the lines. This did not

matter when most transactions were between co-operating utilities wanting to improve the reliability of supplies.

But in a competitive environment accurate pricing will be much more important, especially if industrial lobbies succeed in getting the networks opened up for private transactions by individual companies.

This is a prospect which horrifies many utilities because of the possibility that they could lose their most valuable customers and so be left with the cost of excess capacity. It is an argument which is being strongly debated in the UK where the Government has decided that the transmission grid should be open to all.

Mr Richard Clarke, chief executive of the Pacific Gas and Electric company, says: "We are increasingly evolving a hybrid system with a regulated core market of customers who do not have an economic choice and an industrial market of companies which can choose suppliers."

He sees an "irreconcilable conflict" between the needs of these two groups, because if big companies pick up the cheapest sources of energy, smaller customers will be left with a higher burden of fixed costs as well as more expensive power.

One answer, as Ms Martha Hesse, chairman of the FERC has said, is to find a way to set prices for use of the system which truly reflect the costs of those already owning and

using it. Everybody acknowledges this will be a difficult task in the US. In Britain some solution will have to be found this year to prepare the industry for privatisation.

A partial answer, which the FERC is said to be examining, has been suggested by PG&E on the basis of a scheme which has already been approved for use in California.

For power which is wheeled for reasons of reliability - to prevent power shortages - the utility sets charges to cover the basic cost of the equipment used. But for services beyond that - mainly power wheeled to increase efficiency or profit - it may charge anything from zero to a half share of the savings resulting from transmitting power over a power line compared with using a more expensive local generating plant.

Complicated as it is, this system deals only with transactions between utilities, leaving

the door barred to larger companies unless they negotiate first with their local supplier. If it decides to do so, the US will have to tread down this path with caution.

As Mr Don Vial, former chairman of the Californian Public Utility Commission says: "If you go in for retail wheeling without securing the economies of scale of the old integrated system, then you are buying a pig in a poke."

than 20 years ago.

"That plant was started in 1965 and completed in 1985, and we have only now got a decision on how we are going to be paid for it," Mr Clarke said, with a look more of sorrow than anger.

This sad history, which has been repeated with variations many hundreds of times across the length and breadth of America, provides the background to a series of major changes which now appear to

At present most overhead power lines are controlled by privately-owned electricity utilities

Profile: Pacific Gas and Electric

West Coast blues

RICHARD Clarke, chief executive of Pacific Gas and Electric, the US's largest utility, believes the company may never build another large power station in its extensive territory.

The San Francisco-based utility, like many of the US's

privately owned electricity suppliers is having to adjust to a new world of increasing competition in the power generation sector which the state's regulatory commission insists must be tested against any of the utilities' own plans for building plant.

Many believe that the final passing of the old system was marked by an agreement which PG&E signed with the state regulators last December on the recovery of costs for Diablo Canyon nuclear plant which it started to build with high hopes more

Continued on Page 6

THE PRIVATE LIFE OF HSPE

It is not a well-known fact that in the UK there is a company with the project management capability, the technical know-how, the financial expertise, and really rather a lot of experience of private power generation.

We haven't been keeping it a secret, we've just been rather busy putting our ideas into practice in the USA;

- 5 independent power station projects up and running
- 10 more currently contracted

so this British company already has a track-record that we are proud of.

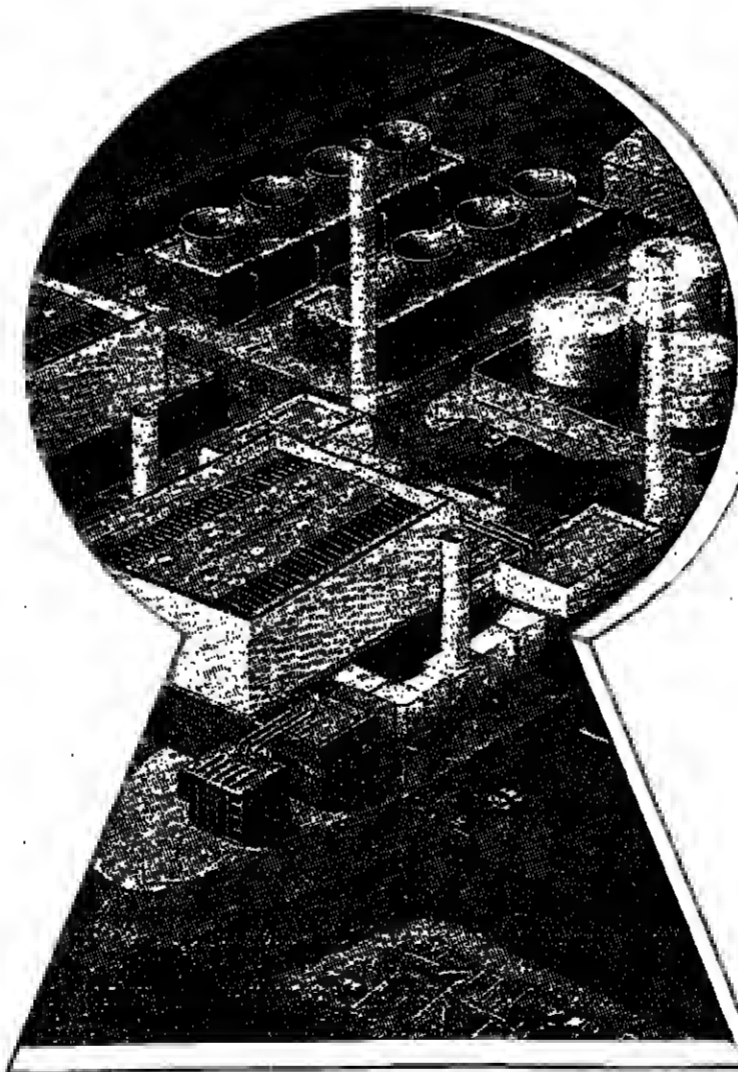
In the UK we will build gas-turbine combined-cycle plants that have made us so successful 'over there'. Why? Because they offer:

Much Higher Efficiency

We burn less fuel to get more power. Higher efficiency means less wasted energy and lower electricity costs.

Much Lower Environmental Impact

We use natural gas - a naturally clean fuel, so there are no sulphur emissions to cause acid rain. In the USA we have reduced NOx emissions to half the permitted levels which are already far lower than European requirements.



Unlike the big coal-fired stations, gas turbines are quiet, dust free and come in small, unobtrusive buildings so they can be sited close to the users. This saves costs and losses in transmission and keeps the price of electricity low.

Much Lower Capital Costs and Lead Times

Combined-cycle plants are much quicker to build than conventional power stations and cost less to construct. Distributors gain all the flexibility of having generating capacity in the right place, at the right time, and at the lowest possible cost.

The privatisation of the electricity industry heralds a new era in power generation bringing increased competition, leading to downward pressures on electricity prices.

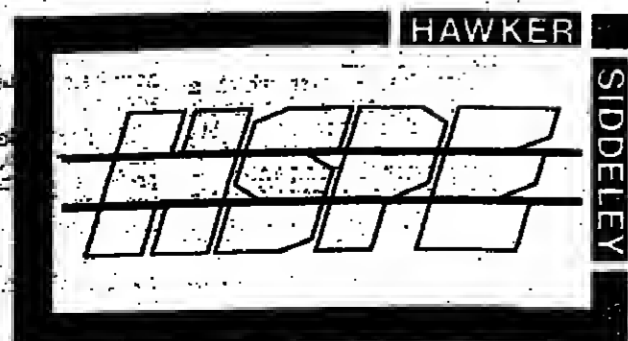
Our proposals for two large power stations are already well advanced - a 350MW station at Corby with East Midlands Electricity and a similar size project at Peterborough. More proposals are under discussion.

If competition in electricity generation is important to you, you don't have to look far afield.

Artist's impression of the proposed 350MW Power Station at Corby, planned in conjunction with East Midlands Electricity.

PRIVATE

HSPE THE POWER PROVIDERS - IT'S A WELL KNOWN FACT



Hawker Siddeley Power Engineering

Hawker Siddeley Power Engineering Limited Burton-on-the-Wolds, Loughborough, Leicestershire, England LE12 5TT
Tel: Wymeswold (0509) 880541 Telex: 341068 HSPE G Fax: (0509) 881210 Cables HSPE G

for power generation, transmission and distribution all over the world

ELECTRICITY 6

Harmonising EC trade in electricity is likely to prove highly contentious, writes Andrew Holmes

Free market still a distant reality

THE EUROPEAN Community's drive to unify the internal market by 1992 includes provisions for free trade in electricity between member countries.

At first glance, this looks a modest enough proposal, given the large volumes of electricity which move across European borders each year, and the fact that such trade has been going on for many years. In practice, however, the free electricity market is likely to prove as contentious, and as difficult to establish, as anything the EC has yet attempted.

At present, cross-border power trading is carried on between electricity utilities. The EC's proposals would allow consumers to buy electricity direct from whichever country offered the cheapest supplies.

The problem is that electricity can only be transported by one means: transmission and distribution lines. In every case these belong to the local utility. To build entirely new, independent transmission facilities from, say, France to West Germany, would be so expensive as to nullify the economic advantage of buying from France in the first place.

Therefore, in conceding common carriage of electricity, local suppliers would in effect be helping a foreign supplier to take their customers away. Not surprisingly, this idea finds little favour with the local utility.

The impetus behind the EC's proposals is a change in the nature of cross-border interchanges which have taken place in the late 1980s. In the preceding period, electricity trade was mainly a load management device, taking advantage of the difference in time

COMPARATIVE GENERATION COSTS*

	Nuclear	Coal
	p/kwh	p/kwh
West Germany	2.87	2.97
Belgium	2.11	2.97
France	1.88	2.62
Japan	3.05	3.06
UK	2.51	2.69
Switzerland	2.95	-

* at 1987 prices Source: UN/ECE

CAPITAL COST OF POWER PLANT (Basic cost per kW)

	Nuclear	Coal
West Germany	1,267	523
Belgium	922	728
France	731	686
Japan	1,243	1,106
UK	1,254	782
Switzerland	1,290	-

* at 1987 prices Source: UN/ECE

zones - and therefore in electricity load patterns - to use power production to its maximum effect.

The key to the system was hydropower. Countries like Switzerland, Austria and Norway produced more electricity than they could conceivably use. This electricity was transported to neighbouring countries, less dependent on hydro, allowing them to switch off more expensive power sources.

In return, when hydro ran low, countries with mainly fossil-fuel production, such as West Germany and the Netherlands,

would return the electricity. Year by year, most countries ended with a rough balance between exports and imports.

Then the French nuclear power programme got into swing. France over-ordered nuclear power stations on a scale which left it, by the mid-1980s, with a massive surplus of capacity.

The answer was to export the surplus. Fortunately for Electricite de France (EdF), its surplus coincided with a deficit in Italian electricity supply, brought on by the usual problems of siting new stations.

Here, to the subtle minds of the EC's energy directorate, DCF, was a fine example of how European integration could bring benefits to all. Some EC members had too much power (France), some had too little (Italy), in some countries power was expensive (Germany), while in others it was cheap (France again, at least in theory). Put them all together, and everything would balance out. Nothing could be simpler.

In fact, there were one or two institutional complications, even before considering the feelings of the electricity utilities themselves. Europe is already integrated into two vast "power pools", which co-ordinate electricity trade: UCPTB, which included the European mainland, as far east as Yugoslavia; and Nordel, which performs the same function in Scandinavia.

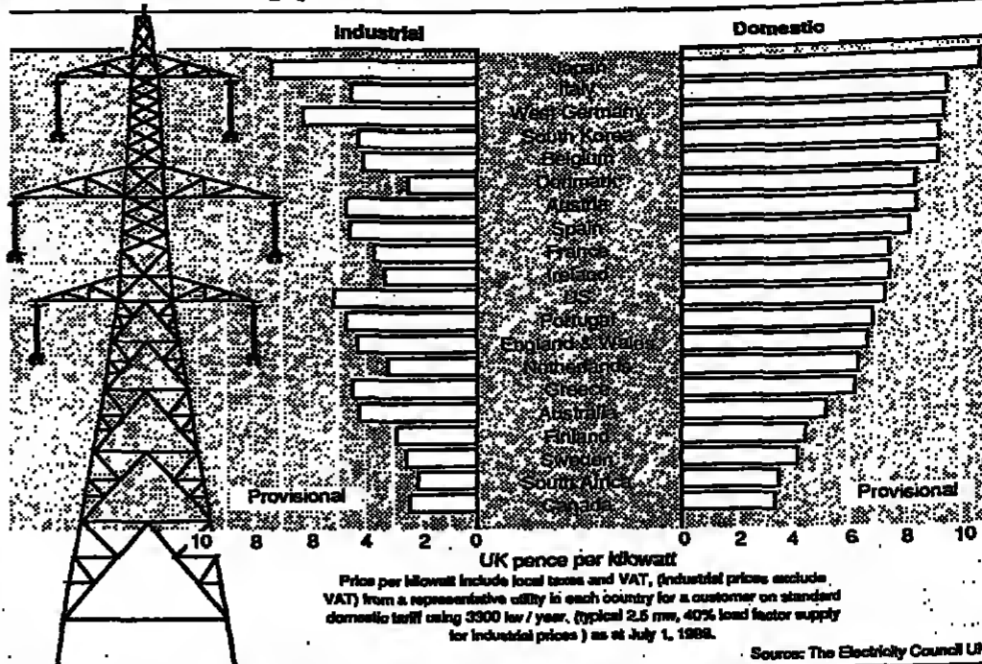
UCPTB includes non-EC countries like Switzerland and Austria, which by unhappy coincidence are the pivots of the system. Much of the electricity traded between France and Italy, for example, actually travels through Switzerland.

Before it reaches the citizens of Milan and Turin, French electricity takes a trip up and down the Swiss Alps, and for reasons of intractable geography, it always will.

The expansion of the EC membership has aggravated the problem by including Spain and Portugal, whose quarrels over electricity trade go back to the 1940s. Spanish utilities regard Portugal as their client as of right, and they will not readily hand her over to France, despite Portugal's enthusiasm for cheap French imports.

The most basic drawback, however, is that the European electricity market is far from being what the British like to call a "level playing field." Utilities in some member countries, like West Germany and Denmark, have been subject to heavy environmental restrictions in their choice of generating sources, largely by national and local political considerations.

World electricity prices



the fun of it, nor did they ask to be subjected to the most stringent environmental requirements in Europe.

German utilities seemed to be fighting a rearguard action. There are signs, however, that the tide is turning in their favour. The public workers' strike in France has demonstrated EdF's vulnerability to industrial action, particularly by the Communist trades union, Confédération Générale du Travail.

Unlikely as it may sound, France was forced to import German electricity in November and December 1988, as well as making emergency coal purchases, to counteract the effects of strike action at its nuclear plants.

conditions which must be weighed against the prospects for a free market in electricity. Does EdF really want to get involved in direct contracts?

Much of the electricity which it exports is sold on a daily "spot-market" basis. If EdF, for whatever reason, does not have power to spare, buyers can be turned away when the beginning of long-term contracts with industrial customers - the biggest of which are small compared with the likes of Italy's ENEL or the UK's Central Electricity Generating Board - is a complicating factor which EdF might well wish to do without. EdF exists to provide electricity for France; anything else is secondary, and anything which threatens to get in the way of the primary purpose is to be avoided.

In the final analysis, EdF is an electric utility like any other, and wants to keep its place within the informal, co-operative framework which is the UCPTB. In other words, it is happiest dealing with other utilities, rather than selling power door-to-door around Europe.

Consultations between the EC Commission and the electric utilities are at an early stage. The Commission has a good deal of learning to do, if its latest proposals on the free market are anything to go by.

The most likely outcome appears to be the 1992 attempt to "harmonise" the EC electricity industry, preparatory to the opening of the market at some indeterminate date in the future.

ABOUT 90 per cent of France's electricity is provided by the state utility Electricite de France (EdF), the remainder coming from the state coal producer Charbonnages de France and from the Rhone hydro corporation. EdF is by far the largest electricity exporter in Europe, with some 10 per cent of its production being sold abroad annually.

"Our problem," says an EdF executive, "is that the other European utilities are afraid of us." The comment, made only half in jest, does something to suggest the curious mixture of envy, horror and pity with which their colleagues abroad regard the executives of EdF. Envy at the French ability to press ahead with nuclear power; horror at the thought that this nuclear juggernaut will begin to roll across their borders; and pity because EdF is so conspicuously becoming a victim of its own success.

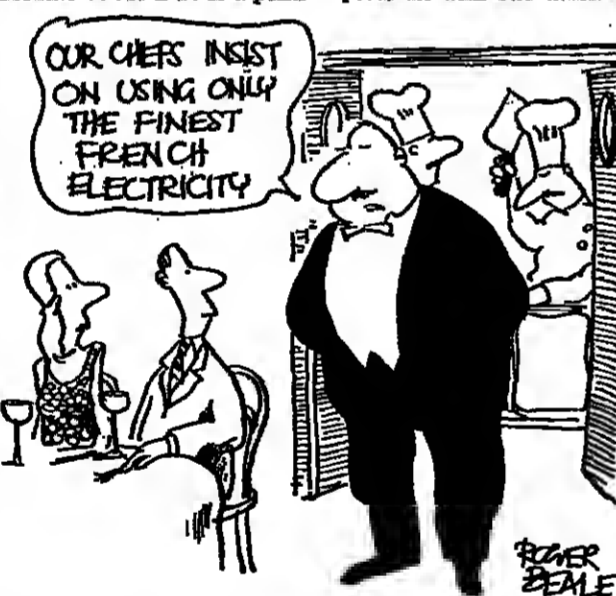
Between 1974 and 1982, France was ordering 6,000MW of nuclear power stations per year, more in every year than the UK has ordered in the past 20 years. Other countries had ambitious nuclear programmes which were subsequently scaled back. France pressed on, even when electricity demand began to falter. The result is that EdF has an overcapacity problem with few parallels in the history of the electricity industry.

Already, nuclear plus hydro-power, which is even cheaper to operate and therefore cannot be displaced even by nuclear, accounts for all but 4 per cent of French electricity production in normal condi-

FRANCE Nuclear giant

tions. Between 1988 and 1993, counting only reactors already under construction, EdF will commission another 13,200MW of nuclear capacity, rather more than the total nuclear capacity of the UK. EdF is already closing down older reactors prematurely to make way for its newer, larger units. And to the process of building these units it has amassed a debt of more than \$40bn.

EdF has gone forward where others feared to tread mainly because of the lack of a political



brake on its ambitions. In France, local government has insufficient power to withstand the force (for the financial inducements) of the great utility, and with the backing of central government, EdF has been able to push through whatever projects it sees fit, up to and including the "commercial" fast breeder reactor Superphenix at Creys Malville.

French anti-nuclear groups, like their German equivalents, were faced with a stark choice: press on with site demonstra-

tions, or draw back. The anti-nuclear movement divided and dispersed, leaving the stage clear for EdF. While in opposition, the French Socialist Party was anti-nuclear and pledged to reverse the tide. But by the time Mr Francois Mitterrand came to power, France was too far down the nuclear road to consider turning back.

Privatisation, competition, deregulation and other buzzwords of contemporary energy policy are without meaning in the French context. The only question is how to make use of the vast power parks on which so much of the nation's time, expertise and money have been spent. The great strategic object of the French nuclear programme, freedom from imported oil, was achieved long ago.

The other side of the master plan, making France the world's leading reactor vendor, has been dissolved by the collapse of the market for nuclear reactors. What has been left behind is a vast surplus of the most expensive source of large-scale power generation money can buy.

While exports may take some of the edge off EdF's financial problems, they will never be anything but a partial solution. The answer lies in boosting electricity demand. To this end, EdF has recently signed what may prove to be a crucially important deal with the aluminium producer Pechiney, offering cut-price electricity for a plant which EdF itself will help finance and partly own.

Andrew Holmes

WEST GERMANY Bleak picture

THE WEST German electricity industry is organised on a regional basis, with the Länder governments playing a central role. Where these local authorities do not actually own a majority share in the electric utilities, they usually have majority voting rights.

Shareholders also include local banks and industries, as well as employees, pension funds and, less typically, private individuals. There are some 1,000 electricity supply undertakings, though the system is dominated by nine large, vertically integrated utilities of which by far the biggest is Rheinisch-Westfälische Elektrizitätswerk (RWE).

Such a description hardly begins to describe the complexity of the system of mutual ownership between the electricity, heavy electrical and coal industries which characterises the West German system. The important point, however, is that there is no clean division between the local authority, the electricity utility and the coal industry.

This goes some way towards explaining the tortuous relationship between coal and electricity, which is codified in two related arrangements.

■ The *Jahresvertrag*, which obliges electric utilities to buy at least 45m tonnes of German-mined coal a year until 1995;

■ the *Kohlepreis*, a levy on electricity prices of 7.25 per cent to make up the difference in cost between domestic coal and imported supplies.

This system has been put under severe strain by the collapse of world fuel prices, making the *Kohlepreis* ruinously expensive, and by the divergence in nuclear development between utilities.

Some states - notably Bav-

ITALY Modest upturn

STRUCTURAL CHANGE is much in fashion among those who regulate the European electricity industries. As a consequence, there is a temptation to overestimate the importance of this aspect of the industry.

A comparison between France and Italy should serve as a useful corrective. Electricite de France (EdF) and Italy's ENEL are structurally very similar, both being national, state-owned, vertically integrated utilities. There the resemblance ends.

France and Italy started from very similar positions in the years before the 1974 increase in the price of oil. Both were highly dependent on imported oil for power generation.

Now France is the undisputed leader of the European nuclear industry while Italy's nuclear programme, never a very happy venture at the best of times, has been put out of its misery by a referendum.

Italy remains dependent on oil for about half of its electricity production while France uses heavy fuel oil in only small quantities. Italy's diversification has brought in natural gas (by accident rather than design), electricity imports and coal. But coal is burned in stations which were originally designed as oil/coal dual firing units. Attempts to construct new coal-firing stations have met with intractable opposition.

National energy plans have rather fallen out of favour in the 1980s, but Italian politicians remain faithful to them. Roughly every three years, politicians produce a comprehensive blueprint for overhauling the national electricity system. They require ENEL to build however many thousand megawatts of new coal and (until recently) nuclear capacity, and set out guidelines for dealing

with local opposition through national government.

But when ENEL actually tries to build any such station, the political backing from Rome fades away, leaving ENEL to do what it can in making deals (though no financial incentives are allowed) with the local politicians.

Its success in doing so has, thus far, been rather limited. ENEL's recently announced plan for a 2,500MW offshore power station - the sea being the only refuge from politicians - is as good a measure as any of its siting problems.

On the face of it, the situation looks bleak. Yet ENEL, once a financial basket case, has managed to turn its modest profits in recent years, while the electricity blackouts endemic in the period up to 1980 are now little more than a memory.

Today the Italian electricity supply industry looks healthier and more stable than at any time in living memory.

Some 15 per cent of ENEL's electricity comes, at bargain basement rates, from the French nuclear parks. Coal has made inroads, if not the spectacular gains once hoped for.

One consequence of ENEL's position is that Italian householders are not encouraged to use electricity. State gas company SINAM advertises itself everywhere, attempting to find consumers to soak up the gas surplus which it bought for itself through contracts signed in the mid-1970s, and of which ENEL is a major beneficiary.

Whereas France's EdF encourages its customers to use electricity for every conceivable purpose, ENEL, not surprisingly, regards what it sells as something of a luxury. Time will tell which of the two is taking the wiser view.

Andrew Holmes

POWER IN EUROPE **POWER IN ASIA**

Comprehensive and in-depth analysis of the international electricity markets

Power in Asia and Power in Europe are the definitive international newsletters for the electricity industry.

- Power in Europe keeps decision makers briefed on the vital moves that shape the European electricity industry.
- Power in Europe provides:
 - in-depth reporting on the financial movements of Europe's electric utilities
 - analysis of the latest political developments to affect the industry
 - insight into the strategies of utilities, governments & regulatory agencies
 - news of European electricity sector fuel purchasing
 - regular coverage of the latest projects & their progress.
- For suppliers, manufacturers and investors, Power in Europe provides unrivalled intelligence on the European electricity business.

Published twice monthly, **POWER IN EUROPE** and **POWER IN ASIA** are both available only on annual subscription from Financial Times Business Information at a cost of £495 (UK) £515 (elsewhere) each. For your free sample copy please return this coupon.

West Coast blues

Continued from Page 5

have taken their toll. "When you are a manager faced with such long delays in getting investments reflected in your price structure, you become very sceptical about investing any more into new plants," Mr Clarke says.

Fortunately the problem is not urgent in the PG&E territory, because slower economic growth, the effects of a major conservation drive a decade ago and continuing excess generating capacity in the region means that for some time supply is likely to be comfortably ahead of demand.

However, the power shortages now beginning to develop on the East Coast of the US are a reminder that California will also have to start thinking about new sources of supply sooner or later.

So where will it come from? The answer is small independent generators, of which the windmills standing rank upon rank on exposed Californian hillsides provide the most visible example.

A decade ago the Public Utilities Regulatory Policy Act (PURPA), passed by Congress during the Jimmy Carter pres-

idency, established conditions for the development of independent power production, which Californian regulators were especially eager to exploit. The act required utilities to buy power from a special class of independent power producers at a price which at least matched their cost of generating the same amount of electricity themselves (their "avoided cost").

Nevertheless, the core of PG&E's electricity business has traditionally been the building and running of power stations in its franchise area. Now it has teamed up with

Bechtel, the engineering project management group, to join the bidding in other utilities' territory.

Mr Clarke believes that in the new competitive world of electricity generation, many utilities will gradually become distribution companies like those being set up in the UK, contracting for new power supplies from independent power suppliers.

He is confident that PG&E will be one of the survivors in the generation market, but the going is likely to be tough for some time.

But the price has been high. Mr Clarke says he is paying an average of 6¢ cents per kWh for this power and up to 11¢ cents for wind power compared

Max Wilkinson

YES I would like to receive a sample copy of the newsletters indicated below. I understand that I am under no obligation to subscribe.

POWER IN EUROPE

POWER IN ASIA

Return to: Mark Storey, Financial Times Business Information, Tower House, Southampton Street, London WC2E 7HA, England. Tel: 01-240 9391 Fax: 01-240 7946 Telex: 296226 BUSINF G

Name _____

Position _____

Organisation _____

Address _____

Country _____ Postcode _____

Tel _____ Telex _____ Fax _____